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FAMILY ECONOMICS REVIEW

HIGHLIGHTS/SPRING 1977

HOME GARDENING

HOME CANNING

HOUSEHOLD ENERGY ADJUSTMENTS

DATA USED IN FAMILY ECONOMICS RESEARCH

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Consumer and Food Economics Institute
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FAMILY ECONOMICS REVIEW is a quarterly report on research of the Consumer and Food Economics Institute and on information from other sources relating to economic aspects of family living. It is prepared primarily for home economics agents and home economics specialists of the Cooperative Extension Service.

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HOME GARDENING AND PRESERVATION OF FRUIT AND VEGETABLES

Home gardening has been presumed to be one of the favorite activities of Americans. However, very little information is available on the number of households with home gardens and their reasons for having them, and on the types of fruits and vegetables grown and their use in home canning and freezing. To learn more about home gardening and preservation of fruits and vegetables, questions on the subject were included in the first phase of the National Study of Consumers' Food-Related Behavior, Attitudes, and Motives, sponsored by the Economic Research Service, USDA.[1] Personal interviews with the main food shopper, or, if none, with the person who had the major responsibility for food preparation, were conducted in over 1,400 households. At the conclusion of the personal interview, in those households where the respondents indicated that someone in the household had canned or preserved fruits or vegetables in 1975, the home canners were asked to self-administer and complete a supplemental questionnaire for USDA's Agricultural Research Service about the canning they did in 1975. Additional households were screened in the same sampling locations used in the personal interview national probability sample, to obtain a large enough and significant sample of home canners. These canners were also asked to complete the supplemental questionnaire. The final number of home canning questionnaires completed was 900. The following two articles, "Home Gardening and Incidence of Freezing and Canning" and "Home Canning," present information on the results of these surveys. Both articles are condensed from a paper presented at the Agricultural Outlook Conference on November 17, 1976, in Washington, D.C.[2]

[1] This is a continuing survey that began in 1976 in which consumers are interviewed periodically about a number of issues.

[2] The complete paper may be ordered from the Consumer and Food Economics Institute (see inside front cover of *Family Economics Review* for address).

HOME GARDENING AND INCIDENCE OF FREEZING AND CANNING

by Evelyn F. Kaitz[1]

The Garden

There has been a slight but steady growth in the number of households with fruit and vegetable home gardens over the past few years. About 43 percent of the households surveyed by USDA's Economic Research Service (ERS) as part of the National Study of Consumers' Food-Related Behavior, Attitudes, and Motives planted a fruit or vegetable garden in 1974; 46 percent planted a garden in 1975; and 48 percent either had already planted or intended to plant one in 1976.

The three reasons reported most frequently for planting a garden in 1975 were: A preference for the taste of fresh fruits and vegetables (50 percent); a desire to save money (40 percent); and as a hobby (33 percent). Of the households that had gardens in 1975, those in rural areas were more likely to have a garden

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to save money or cut down on the food budget and less likely to have a garden as a hobby than those in metropolitan areas. Larger households (those with five or more members) and those with less income were more likely to have a garden to save money, while smaller households and those with more income were more likely to have a garden for a hobby.

Around 85 percent of the 1975 gardens were located in the household yard. The tomato was the most popular vegetable; it was grown by 95 percent of the garden households (table 1). The next most frequently grown vegetables were beans (such as limas, green, wax, and pole) grown in 71 percent of the home gardens; cucumbers, peppers, radishes, and green onions (scallions) grown in about 60 percent of the gardens; lettuce grown in 56 percent; and onions, corn, and carrots grown in about 50 percent.

There were not many fruits grown in the 1975 home gardens. Strawberries and apples were the most popular—mentioned by about 20 percent. Melons, peaches, and pears were the only other fruits that were grown in 10 percent or more of the home gardens. Strawberries were more popular in the West than in the other regions.

In those households that had a garden in both 1974 and 1975, about 65 percent of the

Table 1. Households with a garden that grew selected fruits and vegetables and that froze, and canned or preserved some from their home gardens, 1975

Vegetables and fruits	Grown	Fruits and vegetables from the home garden that were--	
		Frozen	Canned or preserved
		Percent	
Tomatoes	95	26	65
Beans (lima, wax, etc.)	71	54	42
Cucumbers	62	4	29
Peppers	61	28	10
Radishes	59	0	0
Green onions (scallions)	58	2	1
Lettuce	56	1	0
Onions	52	3	4
Carrots	50	15	8
Corn	50	41	15
Squash	45	21	8
Beets	40	7	29
Peas	40	27	7
Turnips	26	7	1
Strawberries	22	16	9
Apples	20	11	15
Melons	13	3	1
Peaches	13	7	10
Pears	10	3	10

Source: National Study of Consumers' Food-Related Behavior, Attitudes, and Motives, conducted by USDA, spring 1976.

respondents answered that the garden was the same size in 1975 as it was in 1974. About 25 percent of the households that had a garden both of these years had a larger garden in 1975 for reasons such as: Wanted to plant more, had more ground available, and to save money. About 70 percent of the households that had a garden in 1975 already had or planned to have one the same size in 1976. About 15 percent had or expected to have a larger garden, and about 10 percent had or expected to have a smaller one.

Because of the interviewing time period and climatic differences in the 48 States surveyed, only about 20 percent of the household gardens had already been planted in 1976. However, to compare gardening during the 3-year period 1974-76, those households were included in which respondents said someone in the household planned to have a garden in 1976. About one-third of the households had a garden in all 3 years, and about two-fifths did not have a garden in any of these years. Very small percentages of households were either new gardeners or those no longer gardening. Gardening was more prevalent by households who had lived in the same dwelling since January 1975. A larger percentage of the continuous garden households (gardens in all 3 years) than the nongarden households had incomes over $15,000 and had three or more members (table 2).

Freezing

All respondents were asked if anyone in their household had frozen any fruits or vegetables in 1975 and, if so, which ones were frozen. If there was a household garden, they were asked which ones came from their home garden. Forty-six percent of all households froze fruits or vegetables in 1975. Households most likely to freeze fruits and vegetables were those in rural areas and those with gardens in all 3 years. Households least likely to freeze were those in larger metropolitan areas, those in the Northeastern region, those in one-member households, and those that had not had a garden in any of the 3 years.

Although freezing was not one of the three most popular reasons for having a garden in 1975, the respondents in around 10 percent of the garden households indicated that there was a garden to provide food for freezing.

About 69 percent of the households with gardens in 1975 froze fruits and vegetables that were grown in their home gardens. The order of popularity was very different for freezing the home-grown vegetables than it was for growing them (table 1). Beans were frozen in 54 percent of the households with gardens; corn was frozen in 41 percent; peppers, peas, and tomatoes were frozen in about 27 percent. Strawberries and apples were again the most popular of the home-grown fruits for freezing but were frozen in only 16 and 11 percent of the garden households, respectively.

Canning and Preserving

Thirty-four percent of the households canned or preserved fruits or vegetables in 1975 whether or not these came from their home gardens. Households with gardens in all 3 years were more likely to have canned or preserved fruits and vegetables than those without home gardens. Around 30 percent of the garden households canned or preserved fruits or vegetables that were grown in the household's garden. About 14 percent of the respondents said someone in their household had a garden to provide food for canning.

The two most popular vegetables grown in the 1975 home gardens were also the two vegetables most likely to be used for canning—tomatoes (canned in 65 percent of the households with gardens) and beans (canned in 42 percent) (table 1). Cucumbers and beets were canned in 29 percent of the households with gardens. Of the home-grown fruits, apples were canned in 15 percent of the garden households; strawberries, pears, and peaches were each canned in about 10 percent.

Approximately two-thirds of the households that canned or preserved fruits and vegetables in 1975 had some difficulty in obtaining lids, jars, and other items needed for canning. Getting lids was a problem for almost all that experienced difficulty. The respondents in 40 percent of the households that said there was difficulty indicated that less fruits and vegetables were canned or preserved in 1975, and about 25 percent said some fruits and vegetables that would have been canned were frozen.

Table 2. Demographic characteristics of households having a fruit or vegetable garden in 1974, 1975, and having or planning to have one in 1976; and of households not having a fruit or vegetable garden in 1974, 1975, and not planning to have one in 1976

Characteristic	Garden households	Nongarden households
	Percent	
Region:		
Northeast	22	25
North Central	34	24
South	28	33
West	16	18
Type of dwelling:		
Own house	87	49
Rent house	6	15
Other (own/rent apartment, mobile home, etc.)	6	36
Occupany period:		
Lived in same dwelling since January 1975	91	84
Did not live in same dwelling since January 1975	8	14
Family income:		
Less than $5,000	12	19
$5,000-9,999	19	22
$10,000-14,999	20	20
$15,000-24,999	24	14
$25,000 and over	11	8
Income change:		
More in 1975 than 1974	36	32
Less in 1975 than 1974	17	14
Same in 1975 and 1974	43	48
Household size:		
1 member	7	23
2 members	32	31
3 or 4 members	38	31
5 or more members	23	15

Source: National Study of Consumers' Food-Related Behavior, Attitudes, and Motives, conducted by USDA, spring 1976.

Note: Sums may not add to 100 due to respondent's lack of knowledge or refusal to answer particular questions.

HOME CANNING

by Carole Davis

Although the Department has for many years maintained publications offering research-based instructions to help the home canner, reports received in recent years through the Extension Service or directly from the consumer indicate that many people are experiencing problems. These range from difficulty in obtaining proper canning supplies to spoilage of home-canned foods. This spoilage results in economic loss and may constitute a hazard to health or life if the food is consumed.

Results from the national survey on home canning indicate that one out of three households canned fruits and vegetables at home in 1975. These foods were canned by 20 percent of the households in large metropolitan areas and 50 percent in rural areas. A smaller percentage of households in the Northeast canned fruits and vegetables than in the North Central, Southern, and Western areas of the country.

Tomatoes were the most popular food item canned. Of those households canning fruits and vegetables, 75 percent canned tomatoes; other vegetables, pickles, and fruits were each canned by 50 percent; tomato sauce and vegetable mixtures were each canned by 20 percent; and about 40 percent preserved jams and jellies.

Of the households who canned fruits and vegetables, excluding jams and jellies, about 10 percent canned a total volume equivalent to less than 12 quarts; 40 percent canned 12 to 49 quarts; 25 percent canned between 50 and 99 quarts; 20 percent canned between 100 and 249 quarts; and about 5 percent canned more than 250 quarts.

Home canners obtained instructions from many sources—some more reliable than others. Friends or relatives were the source of instructions for almost 66 percent of the canners, while 20 percent used cookbooks. USDA publications, Extension Service publications, personal recipes, canning equipment manufacturer's cookbooks, and magazines or newspapers were each used by 10 percent of the canners. A greater percentage of canners with some college education than those with less education used USDA and Extension Service publications.

Most canners (94 percent) used jars designed especially for home canning when canning vegetables and fruits other than jams or jellies. However, 33 percent used other jars, such as those from peanut butter, coffee, and salad dressing. Some canners used both home-canning jars and nonstandard jars. Less than 1 percent of canners used tin cans. The USDA recommends the use of jars designed especially for home canning so that jars will be properly heat tempered, resistant to mechanical shock, the right size for the established processing time and temperature, and the proper size to fit standard home-canning closures.

The most popular sizes of home-canning jars used were the quart and the pint, by 85 and 65 percent of the canners, respectively. Only about 1 out of 10 used half-pint jars, and relatively small percentages used 2-quart and 1½-pint jars. USDA publications primarily contain processing recommendations for foods canned in quart and pint jars. However, processing recommendations are included for a few products in half-pint jars.

About 90 percent of the canners used new flat metal lids with metal bands for canning fruits and vegetables, other than jams or jellies. Porcelain-lined zinc caps and reused flat metal lids with metal bands were each used by 10 percent of the canners. Directions are included in USDA publications for the use of zinc caps as well as two-piece lids with flat metal discs and bands. However, the USDA does not recommend reusing flat metal lids because once an indention has been made in the sealing compound by the jar rim, the lid may not seal properly the second time.

Although paraffin should only be used for jellies, 13 percent of the canners used paraffin for sealing fruits and vegetable products.

Processing Methods Used by Home Canners

The Department recommends the boiling-water-bath method for processing fruits, tomatoes, pickles, and jams, and the use of a pressure canner or pressure saucepan for all vegetables, except tomatoes.

Open-kettle canning is not recommended for any foods except jellies and, in certain climatic

conditions, jams. With the open-kettle method, food is cooked in an ordinary kettle, then packed into hot jars and sealed. The food is not processed after packing in the jars. Open-kettle canning is not a safe practice because temperatures obtained are not high enough to destroy all the spoilage organisms that may be in low-acid foods, such as vegetables other than tomatoes. Spoilage bacteria may also enter the food when the food is transferred from kettle to jar, making it undesirable to can even high-acid foods, such as fruits, pickles, and tomatoes by this method.

Oven canning is not recommended for canning any foods because jars sometimes explode, causing personal injury or damage to the oven. Temperatures obtained in the food in jars during oven processing do not get high enough to insure destruction of spoilage bacteria in low-acid foods.

The table shows the processing method used by home canners for each product they canned. (Since some homemakers used more than one method, the percentages given will not total 100.) A substantial proportion of households incorrectly used the boiling-water-bath method for vegetables (40 percent) and vegetable mixtures (34 percent) and the open-kettle method for fruit (45 percent), tomatoes (35 percent), and pickles (57 percent).

Fruits, tomatoes, and pickles (high-acid foods). The boiling-water-bath method (recommended by the Department for this group of foods) was used by slightly more than 50 percent of those canning fruits and tomatoes and was used by 45 percent of those canning pickles. Pressure methods were used by 20 percent of those canning fruits and 25 percent of those canning tomatoes.

Other vegetables and vegetable mixtures (low-acid foods). The recommended pressure methods for this group were used by over 50 percent of those canning vegetables (other than tomatoes) and 43 percent of those canning vegetable mixtures. The boiling-water-bath method, which is inadequate for these products, was used by 40 percent canning vegetables and 34 percent canning vegetable mixtures. The open-kettle method (not recommended) was used by 26 percent canning vegetable mixtures and 14 percent canning vegetables.

Jams and jellies. Of those canning jams and jellies, about 85 percent used the open-kettle method; 10 percent used the boiling-water-bath method; and about 10 percent used pressure methods.

Canning Procedures Used by Home Canners

Type of pack and filling containers. Fruits and vegetables may be packed raw into jars or they may be preheated and packed hot. About one-half of the canners used the raw-pack method, and about three-fourths used the hotpack method. (Some canners used both methods.)

When using the raw-pack method, peas, corn, or lima beans must be packed loosely into jars, because, unlike other raw vegetables, they will expand during processing. If they are packed tightly there is danger of underprocessing. Only 15 percent of canners used the raw pack for peas, corn, or lima beans, and of these one out of 10 correctly packed them loosely, 5 in 10 packed the vegetables fairly loosely, and 4 in 10 packed them tightly. Raw fruits and vegetables (other than raw peas, corn, or lima beans) can be packed into jars tightly because they will cook down or shrink during processing. About half the canners packed raw vegetables tightly.

With the hotpack method, jars should be packed fairly loosely, as the food will not cook down during processing and tight packing will result in underprocessing. Half the canners packed jars fairly loosely, while more than a third incorrectly packed them tightly.

After raw or heated fruits or vegetables are packed into jars, the food in the jar should be covered with boiling-hot liquid. More than a third of the canners who used the raw-pack method and more than a fourth of those using the hotpack method incorrectly used cold liquid or liquid that was not boiling.

Checking seals. Almost all canners (95 percent) checked jars the day after canning to see if they were sealed. About one-half of those who checked seals found jars that did not seal properly. Among canners that found unsealed

Processing methods used to can specified types of fruit and vegetable products, 1975

Method	Households
	Percent [1]
Boiling-water-bath, total:	61
Fruits	53
Tomatoes	52
Tomato sauce	41
Other vegetables [2]	40
Vegetable mixtures [2]	34
Pickles	45
Jams	13
Jellies	10
Pressure cooker (saucepan), total:	10
Fruits	4
Tomatoes	4
Tomato sauce	4
Other vegetables	10
Vegetable mixtures	5
Pickles	2
Jams	2
Jellies	3
Pressure canner, total:	31
Fruits	16
Tomatoes	21
Tomato sauce	18
Other vegetables	47
Pressure canner (continued)	
Vegetable mixtures	38
Pickles	4
Jams	2
Jellies	3
Open-kettle, total:	70
Fruits [2]	45
Tomatoes [2]	35
Tomato sauce [2]	43
Other vegetables [2]	14
Vegetable mixtures [2]	26
Pickles [2]	57
Jams	85
Jellies	87
Oven, total: [2]	2
Fruits	1
Tomatoes	.6
Tomato sauce	.5
Other vegetables	.4
Vegetable mixtures	.5
Pickles	--
Jams	.8
Jellies	.6

[1]Components cannot be totaled because more than one response is possible.
[2]Results in inadequate processing.

jars, 60 percent used the food immediately, about 33 percent discarded the food, 25 percent recanned the food—starting as if it were fresh, and about 6 percent froze the food from unsealed jars. Any of these responses could be suitable, depending on the number of jars that did not seal. If a dozen or so jars were found to be unsealed, the food would either need to be recanned, frozen, or discarded because using that amount of food immediately would be difficult.

Preparation and storage. The Department recommends that home-canned vegetables be boiled for at least 10 minutes before serving. One-half of the canners prepared canned vegetables in this way. However, one-third of the canners only brought canned vegetables to a boil before serving, and one-fifth served canned vegetables without any heating.

For optimum quality home-canned foods should be used within 1 year. However, properly processed foods may remain safe to eat if stored longer than a year if the seal is not broken and other spoilage signs are absent. Nearly 66 percent of the home canners stored home-canned food, including jams and jellies, for 6 months to 1 year; about 33 percent stored food more than a year; and about 6 percent kept foods for less than 6 months.

Spoilage. Most home canners were aware of some of the signs of spoilage in canned foods, including jams and jellies. Ninety percent recognized a bulging lid as a sign; leakage, mold, and off-odor were each recognized by about 75 percent of canners. About 66 percent correctly thought off-color would be a sign, while about 50 percent correctly thought spurting liquid would be a spoilage sign. Almost 33 percent of the canners incorrectly thought floating fruit or vegetables in the jar would be an indication of spoilage. Fruit or vegetables may float because the pack is too loose; some air remains in the tissues of the product after heating and processing: or, for fruits, the sirup is too heavy.

About one-fourth of the canners had home-canned fruits or vegetables that spoiled in 1975. Twenty percent of the households canning tomatoes experienced spoilage; about 10 percent of the households canning other vegetables experienced spoilage; 7 percent of those canning fruits and vegetable mixtures, 5 percent of those canning pickles, and 3 percent of those canning tomato sauce experienced spoilage; fewer than 2 percent of those canning jams and jellies experienced spoilage.

About one-half of the households having spoilage in tomatoes, other vegetables, fruits, pickles, and vegetable mixtures; and about one-third having spoilage in tomato sauce had used an unrecommended canning procedure.

About two-thirds of those having spoilage of home-canned food in 1975 had an idea as to the cause. (However, the true cause of spoilage was not determined by the survey.) About three-fourths thought food spoiled because the lids did not seal, and one-tenth thought food was processed for too short a time. Other reasons, such as the wrong processing method, food having been packed too tightly into the jar, and food having been overripe when processed, were each given by 3 percent of the canners as possible causes of spoilage.

Home-canning jars were used by 94 percent of those canning fruits and vegetables other than jams and jellies, while only about 33 percent used other jars. Therefore, it would be expected that a larger proportion of home-canning jars could be involved in spoilage. Findings showed that about 9 out of 10 of the 25 percent of canners having spoilage used jars designed for home canning, and about 1 out of 20 used other jars.

Of the 25 percent of households having spoilage, more than three-fourths used new flat metal lids with metal bands, about one-tenth reused flat metal lids. Again, as with the home-canning jars, a large proportion (90 percent) of canners used new flat metal lids for canning fruits and vegetables, while only about 10 percent reused flat metal lids. Porcelain-lined zinc caps and glass lids with rubber rings and wire bails were each used by 5 percent of canners; about 3 percent of canners used paraffin to seal jars.

HOUSEHOLD ENERGY ADJUSTMENTS

by Richard B. Smith[1]

Since the oil embargo and the resulting energy shortages in 1973, prices for residential fuels and gasoline have increased sharply. Between 1970 and 1974 prices of electricity, natural gas, fuel oil, and LP (liquefied petroleum) gas used in households increased an average of 65 percent, while use on a Btu basis declined about 10 percent. Since energy is an input into almost every household function, these changes suggest possible changes in lifestyles and in demand for consumer goods and services. Households studied by USDA's Economic Research Service in the spring of 1976 as part of the National Study of Consumers' Food-Related Behavior, Attitudes, and Motives, were asked about adjustments they may have made as a result of higher energy prices.

Types of Energy Adjustments

Three-fourths of the respondents indicated that higher energy prices had resulted in some type of energy reduction in their households in 1975 compared with 1974. Lighting and heating were most frequently mentioned: Slightly over one-half of the households reduced lighting, and about the same proportion reduced home heating in the colder months. About 21 percent of all households reduced the use of the air-conditioner during the warmer months (this was about two-fifths of those with air-conditioning), but only 9 percent of the households indicated they curtailed the use of energy-using household recreational items such as TV sets, radios, and stereos.

Higher energy prices also affected household laundry activities: 16 percent of all households reduced the use of dryers (two-fifths of those households with dryers). Temperature settings on hot water heaters were reduced in 14 percent of all households.

In the kitchen, the most common adjustment was to reduce the use of ovens—17 percent indicated such a change. Other cooking methods were also affected, though less frequently. Eight percent reduced the use of specialty cooking appliances such as toasters, electric skillets, and the like, and 6 percent reduced stove-top cooking. Eleven percent of the households, or one-third of those households with dishwashers, also reduced the use of this appliance.

Fortunately, the temperature settings on refrigerators were seldom adjusted. (An earlier USDA study found that one-third of the households with refrigerators had temperatures at 45° F or higher. Temperatures higher than 45° can lower food quality and might increase the incidence of food poisoning from bacterial contamination.) Few households discontinued the use of freezers or raised their temperature settings.

Higher gasoline prices apparently didn't have a large effect on household food shopping habits. Only 2 percent of the respondents, primarily those located in rural areas, indicated they had reduced their frequency of food shopping trips to save on fuel. However, 6 percent of the households indicated they had shifted their food purchasing to stores located closer to their homes to reduce gasoline use and costs.

Respondents were asked what energy-related adjustments they would make if energy prices increased by 25 percent in the future. Of the households that had already made some adjustments in 1975, 76 percent would make additional changes—mostly by reducing lighting and heating further. However, compared with 1975, a higher proportion of these households would reduce the use of their clothes dryers, recreational items, and specialty cooking appliances. Of the households who made no adjustments previously, nearly 50 percent indicated they would do so with further increases in prices.

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[1] Economic Research Service, USDA. This article is condensed from a paper given at the National Agricultural Outlook Conference in November 1976, at Washington, D.C. The complete paper may be ordered from the Consumer and Food Economics Institute (see inside front cover of this issue of *Family Economics Review* for address).

Who Makes the Adjustments

Higher income households were more likely to have made adjustments in 1975 and would more frequently try to make further adjustments with increasing energy prices than low-income households. For example, 88 percent of the households with incomes over $15,000 made some adjustment, compared with 57 percent of those with income less than $5,000. More than 60 percent of the households with higher incomes indicated they had made reductions in lighting and home heating, compared with 40 percent of the households with lower incomes. Similarly, a higher proportion of the higher income group reduced the use of the dishwasher, hot water heater, clothes dryer, and air-conditioner than the under-$5,000 income group—higher income households have more adjustment alternatives because they frequently occupy larger living quarters and have bigger inventories of large and small appliances.

Age was another important factor. The fewest adjustments were made by the households where the respondent was over 65 years. Unlike younger households where much time is often spent outside the home, elderly persons often spend much time at home and their life's satisfactions are more directly affected by reductions in energy use. Half of the elderly households made no adjustments, and for most a further 25 percent increase in energy prices would not provide the incentive for cutting back on energy consumption.

Education also appears to be an important factor, although some of the observed differences may be related to income and age. As the educational level of the respondent increased, more energy-reducing adjustments were made or might be made. Only about three-fifths of households where the respondent had only an elementary education had made adjustments, compared with four-fifths of the households where the respondent was a college graduate.

Larger households more frequently made energy-related adjustments than smaller households. About 80 percent of the households with three or more members made some adjustments, compared with 73 percent with two members and 56 percent with only one person. Laundry and cooking adjustments were most frequent among households with five or more members. The fact that single member households made fewer adjustments probably reflects the high proportion in that group of the elderly and young households with a smaller inventory of appliances.

Whether households were owner or renter occupied was another distinguishing characteristic. Almost four-fifths of the owner-occupied households had made adjustments, and four-fifths would make adjustments if energy prices increased by 25 percent. Only two-thirds of the renters had made adjustments, but almost three-fourths would make adjustments if energy prices increased further. The reason for the lower incidence rate among renters appears to be mainly related to method of payment for energy. Payments for the two primary energy sources, electricity and natural gas, were included in the household rent for 20 and 30 percent of the renters, respectively. Renters making indirect payments for energy are not likely to be as aware of how much energy they are using or the cost. Consequently, they had less incentive to make adjustments.

Specific Adjustments for Food and Appliances

Respondents who made cooking adjustments were asked how they reduced the use of ovens, stove-top burners, and specialty cooking appliances. The most common practices for reducing oven use were: (1) Using the oven to cook more foods at the same time, (2) substituting specialty cooking appliances, and (3) purchasing more foods, such as precooked or fresh foods, that needed little or no cooking or baking. Respondents reducing stove-top cooking mainly relied on greater use of specialty cooking appliances or using the oven to cook or bae more food at the same time. A reduction in specialty cooking appliance use was frequently accomplished by using the oven to cook or bake more at the same time. For all three groups, there was a very small shift towards more eating away from home because of higher energy prices. Results indicate that only 4 percent of the households made an effort to shift to foods needing less cooking or heating or no cooking at all. This change could have been accomplished by buying more fresh fruits, prepared bakery and

cereal products, dairy products, processed meats, and delicatessen items. About half the respondents indicating a change in food purchases were less than 35 years of age. The lower income households were more likely to make this adjustment, and in the process some of them may have even increased expenditures for more highly processed foods.

Households generally would not consider the amount of energy used by an appliance before purchasing a new one. Only 10 percent of the households thought energy use would be considered if a stove, refrigerator, or other major appliance costing over $100 needed replacing. Another 8 percent indicated they would consider the cost of running the appliance before purchasing it. Several other aspects of an appliance would be considered more frequently than energy use or costs. Price of the appliance was mentioned most frequently, followed by appliance size and brand name. Appliance style or other features, warranty, availability of maintenance service, and type of energy used were mentioned more frequently than the amount of energy used. Respondents in the Northeast and those with higher education levels appeared to be more interested in energy use of appliances. Only 5 percent of those with less than a high school education said energy use would be considered, compared with 17 percent with a college education. This probably reflects more knowledge or concern about higher prices or potential shortages in the future. In the Northeast 13 percent would consider energy use of the appliance, compared with 6 percent of respondents in the South where electricity and other energy prices were lower.

SOURCES OF GOVERNMENT DATA USEFUL IN FAMILY ECONOMICS RESEARCH

by Cynthia L. Jennings

The FAMILY ECONOMICS REVIEW reports on research of the Consumer and Food Economics Institute, Agricultural Research Service (ARS), and on other materials relating to the economic aspects of family living. Information on family income, expenditures, and other economic conditions affecting the family is interpreted for the use of home economists, nutritionists, educators, and others concerned with families.

Much of the data used in developing articles come from surveys conducted by ARS's Consumer and Food Economics Institute or other U.S. Department of Agriculture agencies. However, articles are frequently supplemented with data from other sources, and some articles are developed entirely from sources outside the Department.

Our readers frequently ask about the published sources used for information on a specific topic. As an aid to understanding the number and variety of data from Government sources used in FAMILY ECONOMICS REVIEW and to identify sources readers may need, the major sources of information are listed. These sources are limited to those from the Federal Government, and other numerous sources of information on or related to family economics research are excluded.

Following is a brief description of the Federal statistical information available under the major subjects which are of interest to family economists. A table presents, by subject area, detailed information on specific publications: Their frequency, type of data, the publishing agency, and secondary subjects covered in the publication. In general, each publication is listed only once. However, some publications, such as CONSUMER INCOME and the SURVEY OF CURRENT BUSINESS, are used so extensively that they have been listed under two or more subject areas.

The prices of publications were not included because they are subject to change. Price information and other details concerning these publications can be obtained by contacting the Agency publishing the information. Some publications are available free from the Agency, while others must be ordered from the Government Printing Office.

Agriculture. The Department of Agriculture (USDA) is the major source of information on agricultural prices and outlook, and on farm income and finances. In addition, both the Department of Agriculture and the Bureau of the Census, Department of Commerce (DOC), report on agriculture population and farm characteristics.

Budgets. The Bureau of Labor Statistics, Department of Labor (DOL), prepares budgets including all household items for urban and retired couples at three levels of living. The budgets are based on the consumer expenditure surveys. USDA prepares separate budgets for food and clothing expenditures.

Education. Statistics summarizing the characteristics of education in the United States are collected and presented periodically by the National Center for Education Statistics of the Department of Health, Education, and Welfare (HEW). The major sources of expenditure data on education are the expenditure surveys from the USDA and the Department of Labor.

Employment and Income. The Department of Labor produces most of the statistics pertaining to employment and income. Information is obtained both from ongoing surveys and from payroll and personnel records. The Bureau of the Census of the Department of Commerce (DOC) and the Department of Agriculture also publish data on employment and income.

Energy. The Federal Energy Administration (FEA) produces most of the general information on energy use, availability, and cost. The Federal Power Commission provides some data from power companies on electricity prices and use. The major source of data on transportation energy use is the Federal Highway Administration under the Department of Transportation (DOT). For additional information on home use of energy, see the section on housing.

Expenditures. The two major types of expenditure data are (1) household data from expenditure surveys, such as the Consumer Expenditure Survey (CES) and the Farm Family Living Expenditure Survey (FFLES), and (2) aggregate data from the Personal Consumption Expenditure series (PCE). The most recent CES, conducted by the Bureau of Labor Statistics of the Department of Labor was in 1972-73; and the most recent FFLES, conducted by the Statistical Reporting Service of the USDA was in 1973-74. Both the CES and the FFLES were nationwide surveys of family income and expenditures. The PCE data produced annually by the Department of Commerce are part of the U.S. National Income and Product Accounts. Estimates are calculated from aggregate data obtained for the most part from business transactions rather than from consumers of the goods and services involved. The two types of data are not interchangeable. Whenever possible FAMILY ECONOMICS REVIEW uses the expenditure survey data, because information on variations in expenditures by families of different types are more useful to family economists than are the PCE estimates which describe expenditures in the economy as a whole and do not account for variations. Either type of data is useful in assessing trends in expenditures.

The PCE estimates are collected and published annually and are likely to be more up to date than data from the CES and FFLES, which are collected about every 10 years.

In addition to the sources listed above that give expenditures for all categories of the household budget, there are a number of additional data sources of expenditures on specific categories, such as food, clothing, transportation, and medical care. These sources are listed under specific categories.

Financial Information. The Federal Reserve Board, the major source of financial statistics, collects data from member banks on credit and savings. Bankruptcy statistics are available from

the U.S. Courts. The main sources of mortgage data are the Department of Housing and Urban Development and the Federal Home Loan Bank Board.

Food. The Agricultural Research Service, USDA, periodically conducts household food surveys which provide data on food consumption and expenditures. The most recent survey was in 1965.[1] The Economic Research Service, USDA, reports on the economic aspects of food and agricultural products, and the Food and Nutrition Service, USDA, annually reports on USDA food programs.

Health and Social Welfare. The Department of Health, Education, and Welfare (HEW) is the major source of health and social welfare statistics. As a division of HEW, the National Center for Health Statistics is responsible for collecting and distributing health statistics. The sources of data include birth, death, and marriage certificates; ongoing household interview surveys on health and demographic factors; direct examination surveys; and surveys of health occupations and institutions. The Social Security Administration produces expenditure and cost information on medical care and social programs.

Housing. The Department of Housing and Urban Development (HUD) publishes major summaries of housing statistics. The Bureau of the Census, Department of Commerce (DOC), also has information on housing from decennial census, such as CENSUS OF HOUSING and CENSUS OF POPULATION AND HOUSING, and from ongoing surveys such as CURRENT CONSTRUCTION REPORTS and CURRENT HOUSING EPORTS. The most recent of these reports is the ANNUAL HOUSING SURVEY.

Population. The Bureau of the Census of the Department of Commerce is the major source of population statistics. Besides the regular decennial census of population (the most recent is 1970), the Bureau conducts many special studies, such as the Current Population Surveys—ongoing sample surveys on social and economic characteristics of the population. Another source of population statistics is the Economic Research Service, USDA.

Price Data. The Consumer Price Index, developed by the Bureau of Labor Statistics, Department of Labor (DOL), measures the average change in prices of goods and services purchased by urban wage earners and clerical workers for day-to-day living. The Wholesale Price Index, also from the Bureau of Labor Statistics, DOL, measures average price changes of all commodities and products before they reach the retail level. A price index of new one-family houses sold is published by the Bureau of the Census, DOC. The farm-retail price spread index, developed by the Economic Research Service, USDA, is based on a market basket representing the average quantities of U.S. farm foods purchased annually per household in 1960-61. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing foods. These indexes are all given in relation to a base period, usually 1967 = 100. Besides measuring price changes, the price indexes can be used to update expenditure and cost-of-living data.

Textiles and Apparel. Data pertaining to textiles and apparel are produced by the Economic Research Service, USDA, and by the Bureau of the Census, Department of Commerce, in the form of ongoing reports. In addition, clothing budgets are developed by USDA.

Transportation. The Federal Highway Administration within the Department of Transportation (DOT) is the main source of data on transportation. The Bureau of the Census, DOC, also produces some information from the CENSUS OF TRANSPORTATION, and the Department of Agriculture reports on transportation as it relates to agriculture and marketing.

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[1] A 1977-78 USDA Nationwide Food Consumption Survey is underway.

Sources of Government data useful in family economics research

Primary subject, publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
AGRICULTURE:					
AGRICULTURAL OUTLOOK	11 times per year	--	X	USDA-ERS	Price data, transportation, textiles, food, expenditures
AGRICULTURAL PRICES	Monthly	--	X	USDA-SRS	Transportation, textiles, food, housing, energy, price data
AGRICULTURAL STATISTICS	Annual	X	X	USDA-SRS	Agricultural population, food, employment
BALANCE SHEET OF THE FARMING SECTOR	do.	--	X	USDA-ERS	Housing, food, transportation, textiles, agricultural finance
CURRENT POPULATION REPORT: P-27 Farm Population	do.	X	--	DOC-BOC USDA-ERS	Education, employment, income, population
FARM INCOME STATISTICS	do.	--	X	USDA-ERS	Food, textiles, transportation, agricultural population
FARM LABOR	Monthly	--	X	USDA-SRS	Labor force
FARM POPULATION ESTIMATES	Annual	X	--	USDA-ERS	Population
HIRED FARM WORKING FORCE	do.	X	--	USDA-ERS	Labor force, income
1974 CENSUS OF AGRICULTURE, County, State, and U.S. summaries	1975, preliminary	X	--	DOC-BOC	Employment, agricultural income, food, energy
BUDGETS: [4]					
COST OF RAISING A CHILD	1971	X	--	USDA-ARS	Food, clothing, education, transportation, housing, medical care
RETIRED COUPLE BUDGETS (3 levels)	Annual	X	--	DOL-BLS	--
SERVICE-LIFE EXPECTANCY OF APPLIANCES	1972	X	--	USDA-ARS	--
URBAN FAMILY BUDGETS (3 levels)	Annual	X	--	DOL-BLS	--

EDUCATION:					
THE CONDITION OF EDUCATION	Annual	--	X	HEW-NCES	Population, employment, income
DIGEST OF EDUCATION STATISTICS	do.	--	X	HEW-NCES	Population, income, expenditures
PROJECTIONS OF EDUCATION STATISTICS TO 1984-85	do.	--	X	HEW-NCES	Do.
SELECTED STATISTICAL NOTES ON AMERICAN EDUCATION	do.	--	X	HEW-NCES	Do.
EMPLOYMENT AND INCOME:					
CHARTBOOK ON PRICES, WAGES, AND PRODUCTIVITY	Monthly	--	X	DOL-BLS	Price data
CURRENT POPULATION REPORT:					
P-60 Consumer Income	Occasional	X	--	DOC-BOC	Population, education
CURRENT WAGE DEVELOPMENTS	Monthly	--	X	DOL-BLS	--
EMPLOYMENT AND EARNINGS	Monthly	X	X	DOL-BLS	Population, energy
FARM LABOR	do.	--	X	USDA-SRS	Agriculture
HANDBOOK ON WOMEN WORKERS	Annual	--	X	DOL-WB	Population, education
HANDBOOK OF LABOR STATISTICS	do.	X	X	DOL-BLS	Population, price data, expenditures.
THE HIRED FARM WORKING FORCE	do.	X	--	USDA-ERS	Agriculture
MANPOWER REPORT OF THE PRESIDENT	do.	--	X	DOL-MA	Population
MONTHLY LABOR REVIEW	Monthly	X	X	DOL-BLS	Price data, energy
1970 CENSUS OF POPULATION AND HOUSING:					
PHC(3) Employment Profiles of Selected Low-Income Areas	1972 (76 parts)	X	--	DOC-BOC	Population
OCCUPATIONAL OUTLOOK HANDBOOK	Biennial	--	X	DOL-BLS	Do.
Supplement	Quarterly	--	X	DOL-BLS	Do.

See footnotes at end of table, p. 26.

Sources of Government data useful in family economics research

Primary subject, publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
EMPLOYMENT AND INCOME:--continued					
SURVEY OF CURRENT BUSINESS:					
National Income and Product Accounts	Monthly	--	X	DOL-BEA	Expenditures, transportation, housing, food, clothing, energy, finance
U.S. WORKING WOMEN - A CHARTBOOK (Bulletin 1880)	1975	--	X	DOL-BLS	Population, education
ENERGY:					
ALL-ELECTRIC HOMES: ANNUAL BILLS	Annual	--	X	FPC	Housing
AVERAGE MONTHLY Kwh CONSUMPTION PER TOTAL CONSUMERS BY CALENDAR YEARS 1965-1975	do.	--	X	USDA-REA	--
FEA DEMAND WATCH:					
Domestic Demand for Petroleum Products	Weekly	--	X	FEA	Transportation
MONTHLY ENERGY REVIEW	Monthly	--	X	FEA	--
MONTHLY PETROLEUM STATISTICS REPORT	do.	--	X	FEA	--
RETAIL PRICES AND INDEXES OF FUELS AND UTILITIES	do.	--	X	DOL-BLS	Price data, housing, transportation
TYPICAL ELECTRIC BILLS	Annual	--	X	FPC	Housing
EXPENDITURES:					
CONSUMER EXPENDITURE SURVEY, 1972-73	1976	X	--	DOL-BLS	Energy, food, housing, textiles transportation, education, health
FARM FAMILY LIVING EXPENDITURE SURVEY, 1973-74	1975	X	--	USDA-SRS	Do.

EXPENDITURES:--continued					
SURVEY OF CURRENT BUSINESS:					
National Income and Product Accounts (Detailed information on personal consumption expenditures appear in July issue.)	Monthly	--	X	DOC-BEA	Energy, food, housing, textiles, transportation, education, health
FINANCE:					
FEDERAL RESERVE BULLETIN	Monthly	--	X	FRB	Employment, housing, textiles, price data
FHLBB NEWS:					
Housing Finance Releases: Conventional home mortgages	do	--	X	FHLBB	Housing
HUD NEWS:					
Housing Finance Releases: FHA home mortgages	do	--	X	HUD	Do.
1970 CENSUS OF HOUSING:					
Vol. V. Residential Finance (data from the Residential Finance Survey of 1971)	1973	X	--	DOC-BOC	Housing, population characteristics
TABLES OF BANKRUPTCY STATISTICS	Annual	--	X	USC-DB	--
FOOD:					
ANNUAL STATISTICAL REVIEW, FINAL REPORT, FOOD AND NUTRITION PROGRAMS, FISCAL YEAR 1974 - FNS 150	1976	--	X	USDA-FNS	--
COST OF FOOD AT HOME FOR FOOD PLANS AT FOUR COST LEVELS	Monthly	X	--	USDA-ARS	--
FOOD CONSUMPTION, PRICES, AND EXPENDITURES - AER 138	[5] 1974	--	X	USDA-ERS	Agricultural income
HOUSEHOLD FOOD CONSUMPTION SURVEY 1965-66	1972 (17 parts)	X	--	USDA-ARS	--

See footnotes at end of table, p. 26.

Sources of Government data useful in family economics research

Primary subject, publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
FOOD:--continued					
NATIONAL FOOD SITUATION - NFS 154	Quarterly	--	X	USDA-ERS	Agricultural income
USDA FAMILY FOOD PLANS:					
Family Food Budgeting... for Good Meals and Good Nutrition, HG 94	1977	X	--	USDA-ARS	--
GENERAL ECONOMIC INDICATORS:					
BUDGETS:					
Urban Family Budgets (3 levels of living)	Annual	X	--	DOL-BLS	--
Retired Couple's Budgets (3 levels of living)	do.	X	--	DOL-BLS	--
SOCIAL INDICATORS	Occasional	X	X	OMB	--
STATISTICAL ABSTRACT OF THE UNITED STATES	Annual	X	X	DOC-BOC	--
STATUS (chartbook)	Monthly	X	X	DOC-BOC	--
SURVEY OF CURRENT BUSINESS	do.	--	X	DOC-BEA	--
HEALTH AND SOCIAL WELFARE:					
HEALTH IN THE UNITED STATES - A CHARTBOOK	Annual	--	X	HEW-NCHS	Expenditures, employment and income, population
HEALTH, UNITED STATES	do.	--	X	HEW-NCHS	Do.
LIFE TABLES	do.	X	--	HEW-NCHS	Population
RESEARCH AND STATISTICS NOTE	Occasional	--	X	HEW-SSA	Do.

HEALTH AND SOCIAL WELFARE:--continued					
THE SIZE AND SHAPE OF THE MEDICAL CARE DOLLAR	Annual	--	X	HEW-SSA	Expenditures
SOCIAL SECURITY BULLETIN	Monthly	--	X	HEW-SSA	Population, price data, employment and income
Supplement	Annual	--	X	HEW-SSA	Do.
SOCIAL SERVICES U.S.A.	Quarterly	--	X	HEW-NCSS	Population
VITAL AND HEALTH STATISTICS [6]	Occasional	X	--	HEW-NCSS	--
HOUSING:					
ANNUAL HOUSING SURVEY - H-150:	Annual	X	--	DOC-BOC	Population, transportation, income, finances, energy
Part A. General Housing Characteristics					
Part B. Indicators of Housing and Neighborhood Quality					
Part C. Financial Characteristics of the Housing Inventory					
Part D. Housing Characteristics of Recent Movers					
Part E. Urban and Real Housing Characteristics					
Part F. Financial Characteristics by Indicators of Housing and Neighborhood Quality					
ANNUAL HOUSING SURVEY - H-170:					
Housing Characteristics for Selected Metropolitan Areas	Annual	X	--	DOC-BOC	Population, transportation, energy, income, finances
CONSTRUCTION REVIEW	Monthly	--	X	DOC-BOC	--
CURRENT CONSTRUCTION REPORTS:					
C-20 Housing Starts	do.	--	X	DOC-BOC	--
C-22 Housing Completions	do.	--	X	DOC-BOC, HUD	--
C-25 New One-Family Homes Sold and For Sale	Monthly, quarterly, annually	--	X	DOC-BOC, HUD	Finances, energy

See footnotes at end of table, p. 26.

Sources of Government data useful in family economics research

Primary subject, publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
HOUSING:--continued					
CURRENT CONSTRUCTION REPORTS--continued					
C-27 Price Index of New One-Family Houses Sold	Quarterly	--	X	DOC-BOC	Price data
C-30 Value of New Construction Put in Place	Monthly	--	X	DOC-BOC	--
C-50 Residential Alterations and Repairs	Quarterly, annually	--	X	DOC-BOC	Population
CURRENT HOUSING REPORTS:					
H-111 Housing Vacancies	do.	--	X	DOC-BOC	Population
H-121 Housing Characteristics	Occasional	--	X	DOC-BOC	Do.
H-130 Market Absorption of Apartments	Quarterly, annually	--	X	DOC-BOC	Do.
H-131 Characteristics of Apartments Completed	Annually	--	X	DOC-BOC	Do.
HOUSING AND URBAN DEVELOPMENT TRENDS	Quarterly	--	X	HUD	Price data, finances
HUD STATISTICAL YEARBOOK	Annual	--	X	HUD	Population, income, finance, expenditures
1970 CENSUS OF HOUSING:					
Vol. I. Housing Characteristics for States, Cities, & Counties	1973 (58 parts)	X	--	DOC-BOC	Transportation, finances, population, energy
Vol. II. Metropolitan Housing Characteristics	1973 (248 parts)	X	--	DOC-BOC	Population, energy, finances
Vol. IV. Components of Inventory Change	1973 (16 parts)	X	--	DOC-BOC	Population, finances
Vol. V. Residential Finance	1973	X	--	DOC-BOC	Do.
Vol. VI. Plumbing Facilities and Estimates of Dilapidated Housing	1973 (52 parts)	X	--	DOC-BOC	Population

HOUSING:--continued

1970 CENSUS OF HOUSING--continued					
Vol. VII. Subject Reports	1973 (9 parts)	X	--	DOC-BOC	Population
HC(S1) Supplementary Reports	Occasional	X	--	DOC-BOC	Population, income
POPULATION:					
CURRENT POPULATION REPORTS:					
P-20 Population Characteristics	Occasional	X	--	DOC-BOC	Education, employment
P-23 Special Studies	do.	X	--	DOC-BOC	Income, education, employment
P-25 Population Estimates and Projections	do.	X	--	DOC-BOC	--
P-26 Federal-State Cooperative Program for Population Estimates	do.	X	--	DOC-BOC	--
P-27 Farm Population	Annual	X	--	DOC-BOC USDA-ERS	Farm population, employment, education, income
P-28 Special Censuses (of specified areas)	Occasional	X	--	DOC-BOC	--
P-60 Consumer Income	do.	X	--	DOC-BOC	Education, employment, income
P-65 Consumer Buying Indicators [7]	Quarterly	X	--	DOC-BOC	Transportation, housing, expenditures, income
FINAL REPORTS OF THE 1970 CENSUS OF POPULATION:					
Vol. 1. Characteristics of the Population					
Part A - Number of Inhabitants	1972 (58 parts)	X	--	DOC-BOC	--
Part B - General Population Characteristics	1972 (58 parts)	X	--	DOC-BOC	--
Part C - General Social and Economic Characteristics	1972 (53 parts)	X	--	DOC-BOC	Education, employment, transportation, income
Part D - Detailed Characteristics	1972 (58 parts)	X	-	DOC-BOC	Do.
Vol. 2. Subject Reports	1973	X	--	DOC-BOC	Education, labor force, income, transportation

See footnotes at end of table, p. 26.

Sources of Government data useful in family economics research

Primary subject publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
POPULATION:--continued					
FINAL REPORTS OF THE 1970 CENSUS OF POPULATION--continued					
Supplementary Reports PC(S1) (Individual subjects)	Occasional	X	--	DOC-BOC	Education, employment, housing
FINAL REPORTS OF THE 1970 CENSUS OF POPULATION AND HOUSING:					
PHC(1) Census Tracts (General characteristics & housing units)	1971	X	--	DOC-BOC	Housing, labor force, income
PHC(2) General Demographic Trends for Metropolitan Areas, 1960-70	1971 (52 parts)	X	--	DOC-BOC	Housing
PHC(3) Employment Profiles of Selected Low-Income Areas	1972 (76 parts)	X	--	DOC-BOC	Employment, education, income
PRICE DATA:					
CHARTBOOK ON PRICES, WAGES, AND PRODUCTIVITY	Monthly	--	X	DOL-BLS	Employment, income
CONSUMER PRICE INDEX	do.	--	X	DOL-BLS	Food, energy, housing, textiles, health, transportation
CURRENT CONSTRUCTION REPORTS:					
C-27 Price Index of New One-Family Houses Sold	Monthly	--	X	DOC-BOC	Housing, expenditures
ESTIMATED RETAIL FOOD PRICES BY CITY (Based on CPI)	do.	--	X	DOL-BLS	Food
FARM-FOOD MARKET BASKET STATISTICS (Published in Agricultural Outlook)	Quarterly	--	X	USDA-ERS	Food, agriculture, income, expenditures

PRICE DATA:--continued					
INDEXES OF PRICES RECEIVED AND PAID BY FARMERS (Published in Agricultural Prices)	Monthly	--	X	USDA-ERS	Food, agriculture, income, expenditures
RETAIL PRICES AND INDEXES OF FUELS AND ELECTRICITY	do.	--	X	DOL-BLS	Energy
WHOLESALE PRICES AND PRICE INDEXES	do.	--	X	DOL-BLS	Food, textiles, housing
TEXTILES:					
CLOTHING BUDGETS FOR CHILDREN	1975	X	--	USDA-ARS	--
CLOTHING QUANTITY BUDGETS FOR INDIVIDUALS	1975	X	--	USDA-ARS	--
COTTON AND WOOL SITUATION	5 times a year	--	X	USDA-ERS	--
CURRENT INDUSTRIAL REPORTS:					
Textiles Mills	([8])	--	X	DOC-BOC	--
Apparel and Leather	([9])	--	X	DOC-BOC	--
TRANSPORTATION:					
COST OF OWNING AND OPERATING AN AUTOMOBILE 1976	1976	X	--	DOT-FHWA	--
HIGHWAY STATISTICS (Published in sections)	Annual	--	X	DOT-FHWA	Energy
Sec. 1. Vehicles, fuels, and drivers					
HIGHWAY STATISTICS SUMMARY BULLETIN (Historical tables)	Decennial	--	X	DOT-FHWA	Do.
NATIONWIDE PERSONAL TRANSPORTATION STUDY 1969-70	1972	X	--	DOT-FHWA	--

See footnotes at end of table, p. 26.

Sources of Government data useful in family economics research

Primary subject publication title and number	Frequency of issuance or date	Data form: Household [1]	Data form: Aggregate [2]	Agency [3]	Secondary subjects covered
TRANSPORTATION:--continued					
1972 CENSUS OF TRANSPORTATION:					
Vol. I. National Travel Survey	1973 (3 reports)	X	--	DOC-BOC	Population, employment and income, education
Vol. II. Truck Inventory and Use Survey	1974 (52 reports)	X	--	DOC-BOC	Energy
Vol. III. Commodity Transportation Survey	1976 (51 reports)	X	--	DOC-BOC	Textiles, energy
Travel and Related Data (table RD-2)	Annual	--	X	DOT-FHWA	Energy

[1]Household data are collected directly from individuals or households and are generally reported as averages or percentages. Data of this type usually are the best source of information on families.

[2]Aggregate data are collected from business transactions and generally reported as totals or as the average amount for each individual or household in the U.S. population.

[3]See agency names and addresses on p. 27.

[4]Budgets for food are listed under the food category and budgets for clothing under the clothing category.

[5]Supplement to 1968 report.

[6]Various reports presenting data from the Health Interview Survey, the Health Examination Survey, the Institutional Population Surveys, the Hospital Discharge Survey, the National Natality and Mortality Surveys, and on health resources.

[7]Discontinued in 1974.

[8]Numerous periodic reports covering production, shipment, or present stock of textiles. Various publication schedules. Subjects include: Woven fabrics, woolen and worsted systems, spun yarn, textured yarn, narrow fabrics, nonwoven fabrics, cotton broadwoven goods, manmade fiber broadwoven goods, and wool broadwoven goods.

[9]Numerous periodic reports covering production, shipment, or present stock of apparel. Various publication schedules. Subjects include: Men's apparel; knit underwear and nightwear; gloves and mittens; women's, misses', and junior's apparel; shoes and slippers.

AGENCIES AND ADDRESSES

DOC-BEA
U.S. Department of Commerce
Bureau of Economic Analysis
14 & K Streets, NW.
Washington, D.C. 20235

DOC-BOC
U.S. Department of Commerce
Bureau of the Census
Washington, D.C. 20233

DOL-BLS
U.S. Department of Labor
Bureau of Labor Statistics
200 Constitution Avenue, NW.
Washington, D.C. 20212

DOL-MA
U.S. Department of Labor
Manpower Administration
(same address as above)

DOL-WB
U.S. Department of Labor
Women's Bureau
(same address as above)

DOT-FHWA
U.S. Department of Transportation
Federal Highway Administration
400 7th Street, SW.
Washington, D.C. 20591

FEA
Federal Energy Administration
National Information Center
12th & Pennsylvania Avenue, NW.
Washington, D.C. 20461

FHLBB
Federal Home Loan Bank Board
320 First Street, NW.
Washington, D.C. 20552

FPC
Federal Power Commission
825 N. Capitol Street
Washington, D.C. 20426

FRB
Federal Reserve Board
Constitution Avenue bet. 20th
& 21st Street, NW.
Washington, D.C. 20551

HEW-NCES
U.S. Department of Health, Education,
and Welfare
National Center for Education
Statistics
1200 19th Street, NW.
Washington, D.C. 20202

HEW-NCHS
U.S. Department of Health, Education,
and Welfare
National Center for Health
Statistics
5600 Fishers Lane
Rockville, Md. 20852

HEW-NCSS
U.S. Department of Health, Education,
and Welfare
National Center for Social
Statistics
300 C Street, SW.
Washington, D.C. 20201

HEW-SSA
U.S. Department of Health, Education,
and Welfare
Social Security Administration
300 Independence Avenue, SW.
Washington, D.C. 20201

HUD
U.S. Department of Housing and
Urban Development
451 7th Street, SW.
Washington, D.C. 20410

OMB
Office of Management and Budget
Executive Office Building
17th & Pennsylvania Avenue, NW.
Washington, D.C. 20503

USC-DB
U.S. Courts
Administrative Office
Division of Bankruptcy
1 First Street, NE.
Washington, D.C. 20544

USDA-ARS
U.S. Department of Agriculture
Agricultural Research Service
Independence Avenue bet. 12th
& 14th Streets, SW.
Washington, D.C. 20250

USDA-ERS
U.S. Department of Agriculture
Economic Research Service
(same address as above)

USDA-FCA
U.S. Department of Agriculture
Farm Credit Administration
(same address as above)

USDA-FNS
U.S. Department of Agriculture
Food and Nutrition Service
500 12th Street, SW.
Washington, D.C. 20251

USDA-REA
U.S. Department of Agriculture
Rural Electrification Administration
Independence Avenue bet. 12th
& 14th Streets, SW.
Washington, D.C. 20250

USDA-SRS
U.S. Department of Agriculture
Statistical Reporting Service
(same address as above)

FAMILY FOOD BUDGETING

"Family Food Budgeting for Good Meals and Good Nutrition," Home and Garden Bulletin No. 94, has been revised. It presents the USDA family food plans at four levels of cost (developed in 1974 and 1975 to take into account new information about food that families use), the nutrient content of foods, nutritional needs of individuals, and food prices. This publication is designed for use by families and by teachers and others who help families to plan nutritious and satisfying meals for the money they can afford. To obtain a free copy, send a post card to the Office of Communication, U.S. Department of Agriculture, Washington, D.C. 20250. Request publication by name and number and include your ZIP code.

THREE BUDGETS FOR A RETIRED COUPLE, AUTUMN 1975

The Bureau of Labor Statistics (BLS), U.S. Department of Labor, has updated to autumn 1975 its three hypothetical annual budgets for a retired couple. The updated budget costs represent the costs at autumn 1975 prices of three hypothetical lists of goods and services that were specified in the mid-1960's to portray three relative levels of living—lower, intermediate, and higher—for a retired couple.

In the autumn of 1975, the estimated U.S. average annual cost of the lower level budget for an urban retired couple (excluding personal income taxes) amounted to approximately $4,500. At the intermediate and higher levels, the budget costs amounted to $6,500 and $9,600, respectively. Costs for all the budgets are about 7 percent greater than the estimated budget costs for the autumn of 1974. Tables are given showing costs for comparative indexes and for 39 metropolitan areas, 4 nonmetropolitan regions, and Anchorage, Al.

The sources of data, methods of calculation, and quantities of goods and services for all the components in the three budgets are described in detail in BLS Bulletin 1570-6, "Three Budgets for a Retired Couple in Urban Areas of the United States, 1967-68." Copies may be obtained for $4.75 from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22151. (Ask for Accession No. PB227521/AS.) Supplements, with budgets for spring 1969-70 and autumn 1971-74, are available free of charge from BLS Regional Offices.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Three Budgets for a Retired Couple, Autumn 1975. *News*, U.S. Dept. of Labor Release 76-1133, April 1976.

1977 GAS MILEAGE GUIDE FOR NEW CAR BUYERS

The "1977 Gas Mileage Guide" for new car buyers is now available. This guide helps in selecting a vehicle for both transportation needs and fuel economy savings. The guide is made available through the joint efforts of the Federal Energy Administration and the Environmental Protection Agency. The 1977 guide has two important features that the 1976 guide did not include: (1) All vehicles are divided into different size classes according to their interior size, and (2) the average annual fuel cost for each car is now given.

According to the requirements of the Energy Policy and Conservation Act (1975), car dealers are required to make this guide available in their showrooms. You may write for copies to: Fuel Economy, National Energy Information Center, Federal Energy Administration, Room 1407, Washington, D.C. 20461.

SOME NEW USDA PUBLICATIONS

(Please give your ZIP code in your return address when you order these.)

The following are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402:

- WINTER RECREATION SAFETY GUIDE. PA 1140. August 1976. 90 cents.

Single copies of the following are available free from the U.S. Department of Agriculture. Please address your request to the office indicated.

From Office of Communication, Washington, D.C. 20250:

- HOW TO PREVENT AND REMOVE MILDEW. G 68. Revised September 1976.
- CONSERVING THE NUTRITIVE VALUES IN FOODS. G 90. Revised August 1976.
- CHEESE IN FAMILY MEALS. G 112. Revised August 1976.
- CONTROLLING THE JAPANESE BEETLE. G 159. Revised December 1976.
- FOOD IS MORE THAN JUST SOMETHING TO EAT. G 216. July 1976.
- METHODOLOGY FOR LARGE-SCALE SURVEYS OF HOUSEHOLD AND INDIVIDUAL DIETS. HERR 40. November 1976.
- DESIGN, CONSTRUCTION, and EVALUATION OF A LOW-COST PANELIZED HOUSE. TB 1544. September 1976.

From Economic Research Service, Division of Information, Washington, D.C. 20250:

- THE HIRED FARM WORKING FORCE OF 1975. AER 355. December 1976.
- FOOD SAFETY: HOMEMAKERS' ATTITUDES AND PRACTICES. AER 360. January 1977.
- THE REVIVAL OF POPULATION GROWTH IN NONMETROPOLITAN AMERICA. ERS 605. Revised December 1976.

From Food and Nutrition Service, Food Stamp Division, Washington, D.C. 20250:

- THE FOOD STAMP PROGRAM. PA 1123. Revised December 1976.

CONSUMER LEASING ACT OF 1976

The Consumer Leasing Act of 1976 became effective on March 23, 1977. Provisions of this act require that companies leasing merchandise make an accurate and detailed disclosure of all terms and costs to the customer. The purpose of the act is to protect the consumer against inadequate or misleading leasing information and to enable the consumer to compare the various lease terms available and, where appropriate, to compare lease terms with credit terms. The act also limits balloon payments. The law applies to the leasing of personal property (basically automobiles and other durable goods) for more than 4 months, and for which the total cost of the transaction is under $25,000. Provisions of the Consumer Leasing Act become additions to the Truth in Lending Act.

Source: Public Law 94-240, 94th Congress, H.R. 8835, Consumer Leasing Act of 1976, March 23, 1976.

Cost of food at home estimated for food plans at four cost levels, March 1977, U.S. average[1]

Sex-age groups	Cost for 1 week				Cost for 1 month			
	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars				*Dollars*			
FAMILIES								
Family of 2:[3]								
20-54 years	23.10	30.40	38.20	45.80	100.00	131.60	165.10	198.20
55 years and over	20.80	27.20	33.70	40.30	90.10	117.70	145.80	174.50
Family of 4:								
Couple, 20-54 years and children--								
1-2 and 3-5 years	32.70	42.50	53.10	63.70	141.40	183.90	229.80	275.70
6-8 and 9-11 years	39.30	51.20	64.30	77.20	169.90	221.70	278.40	334.20
INDIVIDUALS[4]								
Child:								
7 months to 1 year	4.70	5.80	7.10	8.40	20.40	25.20	30.80	36.50
1-2 years	5.30	6.80	8.40	10.00	22.90	29.40	36.30	43.20
3-5 years	6.40	8.10	10.00	12.10	27.60	34.90	43.40	52.30
6-8 years	8.10	10.50	13.10	15.80	35.00	45.40	57.00	68.40
9-11 years	10.20	13.10	16.50	19.80	44.00	56.70	71.30	85.60
Male:								
12-14 years	10.80	13.90	17.40	20.90	46.90	60.10	75.40	90.40
15-19 years	11.90	15.30	19.20	23.20	51.50	66.40	83.30	100.30
20-54 years	11.50	15.20	19.20	23.10	49.90	65.70	83.10	100.20
55 years and over	10.30	13.40	16.70	20.10	44.50	58.20	72.40	87.20
Female:								
12-19 years	9.70	12.50	15.50	18.50	42.10	54.10	67.10	80.20
20-54 years	9.50	12.40	15.50	18.50	41.00	53.90	67.00	80.00
55 years and over	8.60	11.30	13.90	16.50	37.40	48.80	60.10	71.40
Pregnant	11.90	15.40	18.90	22.50	51.70	66.60	82.10	97.60
Nursing	12.60	16.30	20.30	24.10	54.70	70.50	87.80	104.50

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1976 (thrifty plan) and Winter 1975 (low-cost, moderate-cost, and liberal plans) issues of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households from USDA's Household Food Consumption Survey with food costs at 4 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" released monthly by the Bureau of Labor Statistics.

[2]Coupon allotment in the Food Stamp Program based on this food plan.

[3]10 percent added for family size adjustment. See footnote 4.

[4]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home estimated for food plans at three cost levels, March 1977, Northeast Region[1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
FAMILIES						
Family of 2:[2]						
20-54 years	32.10	41.20	49.60	139.30	178.60	214.80
55 years and over	28.60	36.20	43.40	124.00	156.90	188.40
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	44.80	57.20	68.70	194.30	247.80	297.90
6-8 and 9-11 years	54.00	69.20	83.20	234.10	299.90	360.60
INDIVIDUALS[3]						
Child:						
7 months to 1 year	6.00	7.50	8.90	26.00	32.60	38.60
1-2 years	7.10	9.00	10.70	30.90	38.90	46.50
3-5 years	8.50	10.70	12.90	36.80	46.50	56.10
6-8 years	11.00	14.10	16.90	47.80	61.00	73.40
9-11 years	13.80	17.60	21.20	59.70	76.50	91.90
Male:						
12-14 years	14.70	18.70	22.50	63.60	81.10	97.40
15-19 years	16.20	20.80	25.00	70.30	89.90	108.30
20-54 years	16.10	20.80	25.10	69.70	90.00	108.70
55 years and over	14.20	18.00	21.80	61.50	78.10	94.40
Female:						
12-19 years	13.10	16.60	19.90	56.90	72.10	86.20
20-54 years	13.10	16.70	20.00	56.90	72.40	86.60
55 years and over	11.80	14.90	17.70	51.20	64.50	76.90
Pregnant	16.20	20.40	24.30	70.20	88.30	105.30
Nursing	17.20	21.80	26.10	74.40	94.60	112.90

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the Northeast from the USDA's Household Food Consumption Survey with food costs at three selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Boston; New York, Northeastern New Jersey; Philadelphia) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person-add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home estimated for food plans at three cost levels, March 1977, North Central Region [1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
FAMILIES						
Family of 2: [2]						
20-54 years	30.50	37.50	45.10	132.10	162.50	195.50
55 years and over	27.30	33.00	39.60	118.00	143.20	171.90
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	42.70	52.30	62.90	185.00	226.80	272.30
6-8 and 9-11 years	51.50	63.60	76.30	223.30	275.20	330.80
INDIVIDUALS [3]						
Child:						
7 months to 1 year	5.80	7.00	8.30	25.30	30.40	35.90
1-2 years	6.80	8.30	9.90	29.60	36.00	42.70
3-5 years	8.20	9.90	12.00	35.30	43.10	51.90
6-8 years	10.60	13.10	15.70	45.90	56.60	68.00
9-11 years	13.20	16.40	19.60	57.30	70.90	85.10
Male:						
12-14 years	14.10	17.30	20.80	60.90	75.00	90.00
15-19 years	15.50	19.10	23.10	67.20	82.90	99.90
20-54 years	15.20	18.90	22.80	66.00	81.80	98.80
55 years and over	13.50	16.40	19.80	58.40	71.20	85.90
Female:						
12-19 years	12.60	15.40	18.40	54.70	66.60	79.70
20-54 years	12.50	15.20	18.20	54.10	65.90	78.90
55 years and over	11.30	13.60	16.20	48.90	59.00	70.40
Pregnant	15.40	18.60	22.20	66.80	80.80	96.40
Nursing	16.30	20.00	23.80	70.70	86.50	103.20

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the North Central Region from the USDA's Household Food Consumption Survey with food costs at three selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Chicago, Cleveland, Detroit, St. Louis) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home estimated for food plans at three cost levels, March 1977, Southern Region [1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
FAMILIES						
Family of 2: [2]						
20-54 years	30.70	37.80	44.00	132.60	164.10	190.50
55 years and over	27.30	33.30	38.50	118.10	144.10	166.80
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	42.70	52.50	61.20	184.60	227.70	264.80
6-8 and 9-11 years ...	51.60	63.80	74.00	223.00	276.60	320.50
INDIVIDUALS [3]						
Child:						
7 months to 1 year	5.70	7.00	8.10	24.90	30.20	35.30
1-2 years	6.70	8.20	9.60	29.20	35.60	41.50
3-5 years	8.10	9.90	11.60	34.90	42.90	50.10
6-8 years	10.50	13.00	15.10	45.50	56.50	65.40
9-11 years	13.20	16.40	18.90	57.00	70.90	81.90
Male:						
12-14 years	14.00	17.30	20.00	60.60	75.00	86.80
15-19 years	15.50	19.20	22.30	67.30	83.20	96.50
20-54 years	15.30	19.00	22.10	66.10	82.40	95.80
55 years and over	13.50	16.50	19.20	58.30	71.40	83.00
Female:						
12-19 years	12.70	15.50	17.90	54.90	67.10	77.60
20-54 years	12.60	15.40	17.90	54.40	66.80	77.40
55 years and over	11.30	13.80	15.80	49.10	59.60	68.60
Pregnant	15.50	18.90	21.80	67.30	82.00	94.70
Nursing	16.40	20.20	23.40	71.20	87.70	101.30

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the South from the USDA's Household Food Consumption Survey with food costs at three selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Atlanta; Baltimore; Washington, D.C.; Maryland; Virginia) released monthly by the Bureau of Labor Statistics.

[2]10 percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

Cost of food at home estimated for food plans at three cost levels, March 1977, Western Region [1]

Sex-age groups	Cost for 1 week			Cost for 1 month		
	Low-cost plan	Moderate-cost plan	Liberal plan	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
FAMILIES						
Family of 2: [2]						
20-54 years	30.10	38.30	46.10	130.90	165.70	199.50
55 years and over	27.10	33.80	40.50	117.20	146.00	175.50
Family of 4:						
Couple, 20-54 years and children--						
1-2 and 3-5 years	42.10	53.10	64.10	182.90	229.70	277.70
6-8 and 9-11 years	51.00	64.50	78.00	221.20	279.40	337.80
INDIVIDUALS [3]						
Child:						
7 months to 1 year	5.70	6.90	8.40	24.50	29.70	36.20
1-2 years	6.70	8.30	10.00	29.10	35.80	43.40
3-5 years	8.00	10.00	12.20	34.80	43.30	52.90
6-8 years	10.50	13.20	16.00	45.40	57.10	69.40
9-11 years	13.10	16.50	20.10	56.80	71.70	87.00
Male:						
12-14 years	13.90	17.50	21.20	60.20	75.80	91.90
15-19 years	15.30	19.30	23.50	66.40	83.80	101.90
20-54 years	15.10	19.30	23.30	65.50	83.50	100.90
55 years and over	13.40	16.80	20.20	58.00	72.60	87.70
Female:						
12-19 years	12.50	15.50	18.80	54.00	67.30	81.30
20-54 years	12.30	15.50	18.60	53.50	67.10	80.50
55 years and over	11.20	13.90	16.60	48.50	60.10	71.80
Pregnant	15.20	18.90	22.70	65.90	82.10	98.20
Nursing	16.10	20.30	24.30	69.80	88.00	105.10

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1975 issue of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households in the West from the USDA's Household Food Consumption Survey with food costs at three selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" (Los Angeles, San Francisco, Oakland) released monthly by the Bureau of Labor Statistics.

[2]10 Percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

CONSUMER PRICES

Consumer price index for urban wage earners and clerical workers

(1967 = 100)

Group	March 1977	Feb. 1977	Jan. 1977	March 1976
All items	178.2	177.1	175.3	167.5
Food	188.6	187.7	183.4	178.7
Food at home	186.9	186.2	181.2	177.7
Food away from home	195.2	193.6	192.2	182.8
Housing	185.5	184.3	183.1	174.5
Shelter	186.3	185.3	184.1	176.3
Rent	150.8	150.2	149.5	142.7
Homeownership	199.3	198.1	196.7	188.7
Fuel and utilities	198.5	196.4	194.8	178.9
Fuel oil and coal	281.4	278.3	271.7	247.6
Gas and electricity	208.5	205.4	204.2	183.7
Household furnishings and operation	174.6	173.6	172.6	166.6
Apparel and upkeep	151.7	150.8	150.0	145.0
Men's and boys'	152.6	150.6	148.8	145.4
Women's and girls'	143.3	143.3	143.0	138.5
Footwear	155.4	154.4	153.2	147.5
Transportation	174.8	173.3	172.1	159.8
Private	174.1	172.7	171.4	158.5
Public	180.4	178.9	178.7	172.3
Health and recreation	170.7	169.8	169.0	160.6
Medical care	197.6	195.8	194.1	180.6
Personal care	167.3	166.7	166.2	157.4
Reading and recreation	155.8	155.5	154.9	149.0
Other goods and services	157.3	156.9	156.7	151.8

Source: U.S. Department of Labor, Bureau of Labor Statistics.

INDEX OF PRICES PAID BY FARMERS DISCONTINUED

The Index of Prices Paid by Farmers for Family Living Items, which usually appears in this spot, has been discontinued by the Department because of similarities in prices paid by farmers and urban dwellers. Data from the Consumer Price Index is being used for calculating the monthly parity index.

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FAMILY ECONOMICS REVIEW

HIGHLIGHTS/SUMMER 1977

CLOTHING AND TEXTILE DEVELOPMENTS

BANKRUPTCY

USE OF CREDIT CARDS

FOOD DOLLARS, 1965 AND 1975

ARS-NE-36

Consumer and Food Economics Institute
Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

FAMILY ECONOMICS REVIEW is a quarterly report on research of the Consumer and Food Economics Institute and on information from other sources relating to economic aspects of family living. It is prepared primarily for home economics agents and home economics specialists of the Cooperative Extension Service.

Authors are on the staff of the Consumer and Food Economics Institute unless otherwise noted.

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Hyattsville, Md. 20782

NEW DEVELOPMENTS IN CLOTHING AND TEXTILES

by Annette Polyzou

Flammability

Finishes. In April 1977, the Consumer Product Safety Commission (CPSC) banned the production and sale of children's clothing treated with the flame-retardant chemical TRIS (2,3-dibromopropyl) phosphate. Recent studies indicate that TRIS may be a potential hazard as a human mutagen and carcinogen.

The CPSC's Bureau of Economic Analysis (BEA) estimated that at least 40 percent of all children's sleepwear is treated with TRIS as a flame retardant. Most TRIS-treated sleepwear garments are made of 100 percent polyester. Although all-polyester knits are treated exclusively with TRIS, some other types of polyester garments are treated with flame-retardant chemicals other than TRIS. All-acetate and -triacetate fibers in children's sleepwear, as well as blends of acetate or triacetate with other fibers, also contain TRIS. Garments containing TRIS are manufactured from fibers or fabrics topically finished with the flame-retardant chemical. A certain amount of TRIS is therefore loosely contained on fibers and can be absorbed through the skin or ingested by an infant's sucking on a garment treated with TRIS.

The BEA estimated that the ban of children's clothing treated with TRIS will apply to approximately 20 million garments, sizes 0-14, currently in the retail channel as well as about 7 million square yards of TRIS-treated fabric intended for children's sleepwear. Of the estimated 20 million TRIS-treated garments, about 2 to 4 million have already been sold to customers. The original ban required retailers to repurchase from consumers or replace any TRIS-treated children's wearing apparel, worn or unworn, that has not been washed. Several washings may remove as much as 95 percent of surface TRIS from a garment, thereby substantially reducing the risk of illness from absorption or ingestion of the chemical. The original ban also required manufacturers to repurchase unwashed, TRIS-treated garments from retailers. However, the ban was contested in court, and as of May 5, 1977 the ban required that the costs of repurchase must be distributed among garment manufacturers, fabric or yarn manufacturers, and TRIS manufacturers. The ban was still being contested as this issue of FAMILY ECONOMICS REVIEW went to press.

Antiblaze-19[1] produced by Mobile Chemical Co. and Emulsion-212 produced by Apex Chemical Co. are possible flame-retardant chemical substitutes for TRIS, although, presently, neither chemical has been tested for carcinogenicity. A safer alternative to chemical flame-retardant additives includes inherently flame-retardant fabrics. Such fabrics include (1) cordelan, sold under the brand names of Matrix, Kohijiun, and Vinal/Vinyon; (2) modacrylic, sold under the brand names of SEF (Self-Extinguishing Fabric) and Kanechron; and (3) blends of cordelan and modacrylic with polyester or nylon.

A new flame-retardant finish for cotton-polyester blends has recently been developed by Agricultural Research Services's (ARS) Southern Regional Research Center. No commercial flame-retardant finish presently exists for common cotton/polyester blends. The new finish, Thpc-urea-PVBr, consists of the cotton flame-retardant tetrakis (hydroxymethyl) phosphonium chloride reacted with urea (Thpc-urea) and the polyester flame-retardant polyvinyl bromide (PVBr). Fabric treated with the Thpc-urea-PVBr solution retains more than half its tearing strength, has a good "hand" or feel, and also retains its flame resistance after 50 launderings. Additional research is necessary before the treatment can be made available for commercial use since fabric treated with Thpc-urea-PVBr tends to discolor slightly under certain laundering conditions.

Standards. Current Federal flammability standards include the CS 191-53 Standard for the Flammability of Clothing Textiles, the FF 3-71 Standard for the Flammability of Children's Sleepwear, Sizes 0-6X, and the FF 5-74

[1] Trade names are used in this publication solely for the purpose of providing specific information. Mention of a trade name does not constitute a guarantee or warranty of the product by the U.S. Department of Agriculture or an endorsement by the Department over other products not mentioned.

Standard for the Flammability of Children's Sleepwear, Sizes 7-14. The CS 191-53 standard has applied to all articles of wearing apparel since July 1954, excluding interlining fabrics, hats, gloves, and footwear. This standard was designed to provide minimum protection by prohibiting the manufacture or sale of fabrics and articles of wearing apparel that are highly flammable. The FF 3-71 and FF 5-74 standards became effective in July 1972 and May 1975, respectively. Both standards apply to any article in the specified sizes worn primarily for sleeping, such as nightgowns, pajamas, and robes. Excluded from the standards are diapers and underwear.

The CPCS is considering the feasibility of updating the CS 191-53 standard to provide increased protection from burn injuries related to all apparel items except shoes. A proposed General Wearing Apparel Standard would provide a new test method, the mushroom test, designed to measure the ease of ignition of fabric and the rate of heat transferred from burning fabric to the body. The mushroom test may be a better measure of potential burn injury sustained in real-life situations than the self-extinguishing, vertical test method, now in effect for the specific end-use standards, which measures the rate of flame spread.

The proposed apparel standard would categorize fabrics into four classes according to ease of ignition and rate of heat transfer and would categorize garments into three classes according to specific measurements.

Class 1 *fabrics* would include those which ignite the least easily and/or burn slowly and at a low temperature. Class 4 would include those fabrics which ignite the easiest and burn the fastest and at the highest temperature. Class 4 fabrics would be prohibited from use in wearing apparel except in end-uses approved by the CPCS.

Class 1 *garments* would include those which fit the body loosely, flare away from the body, and cover most of the body, such as tent dresses and nightgowns. Class 3 garments would include tight-fitting garments such as underwear and swimwear.

A balance of safety would be achieved by coordinating garment classification with fabric classification. As an example, garments in class 1 would be required to be made only from the fabrics in class 1. The remaining classes of garments would be assigned to specific classes of fabrics according to designated garment measurements.

Care Labeling

A trade regulation rule pertaining to the care labeling of textile wearing apparel was enacted by the Federal Trade Commission (FTC) in July of 1972. The rule was designed to help consumers avoid damage to items through improper care and to inform consumers of the care necessary to insure the utility and appearance of textile wearing apparel. Revisions in the present Care Labeling Rule were proposed by the FTC in January 1976 in order to give consumers clearer and more complete care instructions. The proposed new Care Labeling Rule retains and clarifies certain aspects and expands other provisions of the present rule. The proposed, revised rule specifies that uniform terminology must be employed in care instructions as adopted by the FTC from the American Society for Testing and Materials.

In general, washing instructions must disclose the method of washing and drying and a description of temperatures, the use of bleach and specific type of bleach in instances where not all commercial bleaches can be used, and the use of an iron and ironing temperatures. Drycleaning instructions must disclose the type of solvent to be used in instances where not all commercial solvents can be used. Both washing and drycleaning methods must be disclosed as alternative care procedures for garments other than underwear and finished household items which will not be damaged by either method. The proposed, revised Care Labeling Rule expands the present rule's coverage to include suede and leather apparel, household furnishings, yarn, carpets or rugs, and intermediate components.

Fibers and Processes

Fibers. The current fashion trend toward a natural look in clothing has placed great emphasis on the natural fibers of cotton and wool. Presently, cotton and wool prices are somewhat above competitive manmade fiber prices because of the tight supplies of these natural fibers in relation to demand. Acrylic simulates the natural-fiber look of wool. Acrylic fibers do not felt and are stronger, easier to

care for, softer, and provide more warmth for less weight than wool fibers. Acrylic has been in use since 1950 in apparel (mainly sweaters), blankets, carpets, fleece and furlike fabrics, and home furnishings. In recent months, acrylic has accounted for less than 9.0 percent of total U.S. shipments of manmade fibers; however, the introduction of two new fibers may increase the use of acrylic.

Fina, a 1.2-denier fiber introduced by Monsanto Textiles in November 1976, is presently the finest-denier acrylic produced in the United States. The development of such a fine-denier acrylic will enable acrylics to become an all-seasons product by expanding its market from mainly fall apparel, carpets, and home furnishings to lighter weight goods such as single, double, and warp knits and lightweight wovens, including sheers.

A new acrylic staple, code name ATF-1017, has recently been developed by Bayer A. G. in West Germany. The new acrylic is 25 percent lighter in weight than standard acrylics, absorbs water rapidly and dries quickly. ATF-1017 fibers can absorb approximately 30 percent by weight of water as compared with 40 percent for cotton and wool. In contrast, synthetic fibers have a much lower absorption capacity—5 percent for acrylics and polyester and 10 percent for nylon. The new acrylic's drying properties, tested at 12 minutes, were slightly slower than the 9 minutes recorded for standard acrylics but much faster than the 30 minutes recorded for cotton and wool. In addition, ATF-1017 fibers absorb more moisture than natural or synthetic fibers before giving the sensation of dampness. Such qualities lend the new acrylic fiber to end uses in such areas as clothing and furnishing fabrics where perspiration absorbency is desirable.

Processes. The demand for leather, used mainly in outerwear, has also been increased by the recent trend toward the natural look in clothing. PolyRetan, a new experimental process for producing leather that is drycleanable by conventional methods and in coin-operated machines, has recently been developed by chemists at Agricultural Research Service's (ARS) Eastern Regional Research Center. Graft polymerization—a treatment in which leather is chemically united with a synthetic polymer—and dyeing, and fat liquoring—a treatment which lubricates and softens leather—are combined into one step. Also, the synthetic polymer, the dye, and the fat liquor are united with leather at the molecular level rather than simply coated, mixed, or impregnated, resulting in a leather which resists drycleaning solvents as well as mildew and has excellent strength and improved stretchability. Such properties lend the new leather to end-uses in clothing and upholstery.

ARS's Stored-Product Insects Research and Development Laboratory at Savannah, Ga., has recently discovered that an insecticide, consisting of pyrethrins and piperonyl butoxide, can be used effectively as a mothproofing agent for woolens. Tests conducted on woolens sprayed with the insecticide revealed that the wool cloth was protected from larva of the webbing clothes moth and the black carpet beetle for a test period of 6 months. The insecticide has a low toxicity level to humans and should be available for public use in the near future.

References

Blum, A., and Ames, B. N. 1977. Flame-retardant additives as possible cancer hazards. *Science* 195: 17-23.

Chemical and Engineering News. Bayer develops low-absorbent acrylic fiber. Dec. 6, 1976 issue, p. 22.

Consumer Newsweekly. 1977. War against cancer-causing chemicals escalates. *VI* (23): 1-2.

Consumer Product Safety Commission. 1975. Flammable Fabrics Act, revision and recodification of regulations. *Federal Register* 40 FR 250, 59884-59957.

——— 1977. Children's wearing apparel containing TRIS; interpretation as banned hazardous substance. *Federal Register* 42 FR 68, 18850-18854.

——— 1977. TRIS and fabric, yarn, or fiber containing TRIS; additional interpretations as banned hazardous substances. *Federal Register* 42 FR 87, 22878.

Reichman, C. 1977. Tris question steers quest for flame retardants into different direction. *Knitting Times* 46 (5): 8-9.

Textile Organon. 1977. Selected U.S. monthly textile fiber data (table). 48 (4): 56.

U.S. Department of Agriculture. 1976. Easy-care leather made in new USDA process. *News*, October 19 issue, pp. 2995-76.

——— Agricultural Research Service. 1975. Flame retardant coming for cotton-polyester blends. *Agricultural Research* 23 (1): 14.

——— Agricultural Research Service. 1976. Mothproofing woolens. *Agricultural Research* 24 (7): 16.

——— Agricultural Research Service. 1977. Drycleaning leather. *Agricultural Research* 25 (9): 12-13.

——— Economic Research Service. 1977. Cotton and Wool Situation, CSW-19.

Walsky, L. S. 1977. Flammable fabric legislation: An update. *Knitting Times* 46 (5): 13-14.

Selected articles from the *Daily News Record*, *The New York Times*, *The Wall Street Journal*, and *The Washington Post*.

BANKRUPTCY AND ITS ALTERNATIVES

by Connie M. Hoerman

Consumer installment debt per capita increased 55 percent between 1971 and 1976. For fiscal years 1971 and 1976 the number of nonbusiness bankruptcy filings increased from 182,249 in 1971 to 211,348 in 1976. Bankruptcies are one indication that families and individuals are experiencing financial difficulties. These difficulties may stem from inflation, illness, unemployment, changes in family composition, or poor money management. Families who are having difficulties have several options: They may seek to solve their problems through financial counseling or a Wage Earner's Plan, or they may turn to straight bankruptcy for relief.

Financial Counseling

The major purpose of a financial counselor is to help family money managers obtain a realistic picture of their financial situation and to suggest ways to deal with problem areas before bankruptcy becomes the only alternative. Nonprofit consumer credit counseling services can be found in many major cities; and financial counseling is also offered by many local social service agencies, banks, and credit unions. Debt adjusters or debt poolers can be mistaken for financial counselors, but they are actually in business to make a profit from other people's debt. Their policies and practices can lead to abuse, and their services have been outlawed in 26 States and regulated in 15. Debt adjusters or debt poolers will always require that the consumer pay money to them for the repayment of debts, whereas a financial counseling service may or may not handle money for the consumer. By asking to see a detailed accounting of how his money will be used to pay creditors and of the amount of money the company will keep for its services and expenses, the consumer will have some idea of the company's method of operation.

Families who are being threatened by repossession of the family car, foreclosure of the mortgage on the house, garnishment of wages, or endless calls and letters from creditors may wish to consider filing for relief under Wage Earner's plans or straight bankruptcy.

Wage Earner's Plans

Chapter XIII of the Bankruptcy Act, also known as Wage Earner's Plans, was passed by Congress in 1938 as an amendment to the Bankruptcy Act. It allows the debtor to pay off his debts from his regular paycheck while being protected by the bankruptcy court from lawsuits, garnishment of wages or other assets, repossession or interference with his property, or harrassment. Within the past two decades, filings under the Wage Earner's Plans have amounted to about 17 percent of all nonbusiness bankruptcy filings. In fiscal year 1976 there were over 33,000 filings.

Only wage earners or other persons regularly employed are eligible to file for relief. Also, the debtor's finances must be at a level such that

debts can be paid off within a reasonable amount of time. In general, the debtor's essential living expenses (food, clothing, transportation, medical, and so forth) must not exceed approximately 75 percent of his take-home pay per month, so that about 25 percent can be turned over to a trustee appointed by the court for the repayment of debts. If the debtor can pay off his debts within approximately 3 years, the plan is generally considered feasible.

A Wage Earner's Plan is an answer for the family who has gotten behind in its credit payments and who merely needs a little time and freedom from pressure by creditors to get back on its feet. If most of a debtor's obligations are for secured loans rather than unsecured loans, he will probably fare much better under the Wage Earner's Plan, if he can qualify, than under straight bankruptcy. Secured loans are generally for such items as vehicles, furniture, or appliances on which the creditor holds a conditional sales contract, chattel mortgage, or security agreement. A debtor could lose these secured items after a straight bankruptcy; whereas, he can keep them after successfully paying off the debt under the Wage Earner's Plan.

The cost of the Wage Earner's Plan includes court costs, trustee's fees and costs, and attorney's fees. Court costs include a $30 filing fee and 1 percent of all monies paid to the trustee. The court establishes the trustee's fee, which may not exceed 5 percent of all monies paid to him by the debtor; and the trustee is granted an allowance for his costs, also not to exceed 5 percent. The trustee is paid from the money available to pay creditors.

For persons using an attorney's services, the fee runs at approximately $300 and can be paid in installments along with the other creditors. "How-to" books are available for persons wishing to file their own Wage Earner's Plan, and the necessary forms can be purchased from some stationary stores that stock legal forms. However, many debtors prefer to consult a lawyer, since accuracy in completing the forms is very important and since a lawyer may know of provisions that could save the debtor money. Local Legal Aid Societies may be of help to low-income debtors, and some experienced financial counselors may be able to handle simple Wage Earner or bankruptcy cases.

Approximately half of the people who file under the Wage Earner Plans do not complete their plans as originally proposed. Some persons cannot tolerate the restrictions imposed by the Wage Earner's Plan, such as not being able to incur new debts without the permission of the court and turning over a large part of their check each payday for the trustee to distribute.

Bankruptcy

Bankruptcy is available to burdened debtors through long-established Federal Laws and is provided for by the U.S. Constitution (Article I, Section 8, Clause 4). In fiscal year 1976 over 200,000 nonbusiness bankruptcies were filed in the United States. Most bankruptcies are voluntary—only about 1,000 involuntary bankruptcies are filed each year.

In going bankrupt a debtor turns over all his nonexempt property to the court so that it can be sold and the proceeds distributed among his creditors. Often there is little money to distribute, since a debtor's most necessary and major possessions are usually exempt—the equity in his home, the car he drives to work, the tools of his trade, home furnishings, clothing, life insurance policies, and some savings. State laws determine exactly which items are exempt. Debts that cannot be discharged in bankruptcy include certain taxes and wages owed, money or property obtained by fraud, and alimony or child support.

A $50 filing fee must be paid before a bankrupt can receive a discharge. Attorney's fees in a bankruptcy case usually run from $200 to $500 and are often required to be paid in advance. As with the Wage Earner's Plan, the debtor may be able to file the petition and prepare the necessary forms himself, thus saving the cost of an attorney.

Even if a secured debt is discharged through bankruptcy, the debtor may still lose the secured item. The mortgage on his house can be foreclosed and his car and furniture repossessed, if he is still making payments on them, unless the bankrupt works out repayment arrangements with the creditors holding his secured loans. Straight bankruptcy can help persons whose debt is mostly unsecured, particularly people with high medical and hospital bills.

After bankruptcy a debtor may find that his credit rating is much better than it was before bankruptcy, even though his record of bankruptcy will follow him for years. Creditors are often happy to lend to a recent bankrupt since they know he may have extra cash on hand now that he has fewer debts and they know he cannot go bankrupt for another 6 years. For these reasons, a recent bankrupt must be particularly cautious about taking on any new debt. If he gets into debt trouble within 6 years, the Wage Earner's Plan is still available to him and can be used as often as necessary.

Persons desiring more information on bankruptcy and the Wage Earner's Plan should consult a lawyer, Legal Aid Society, or credit counseling service. Fact sheets on these two subjects can be obtained by sending a request to the Administrative Office of the United States Courts, Bankruptcy Division, Supreme Court Building, Washington, D.C. 20544.

References

Administrative Office of the United States Courts, Bankruptcy Division. Bankruptcy filings by class. (Fact sheet, 2 pp.)

——— Some general information concerning bankruptcy. (Fact sheet, 7 pp.)

——— Some general information concerning the Wage Earner's Plan under Chapter XII of the Bankruptcy Act. (Fact sheet, 6 pp.)

Board of Governors of the Federal Reserve System. 1974. Installment credit (table). *Federal Reserve Bulletin* 60 (2) A54.

——— 1977. Consumer installment credit (table). *Federal Reserve Bulletin* 63 (2): A42.

Changing Times. 1975. What happens if you go bankrupt. 29 (6): 39-42.

U.S. Department of Labor, Bureau of Labor Standards. 1967. [Currently the Bureau of Employment Standards.] Summary of State laws prohibiting or regulating the business of debt pooling. (Fact sheet, 15 pp.) Addendum 1969.

THE MANAGEMENT AND USE OF CREDIT CARDS

by Connie M. Hoerman

Over 300 million credit cards are in use in the United States today (*4*).[1] They are offered by banks, credit card companies, department stores, oil companies, airlines, and other merchants. Most can be used either as 30-day accounts or as revolving credit.

Bank credit cards are the fastest growing type of credit card today. Bank credit cards offer flexibility to the consumer for charging a wide variety of merchandise and services from many businesses on a single card. Many merchants welcome bank credit cards because the store is immediately reimbursed for the charged purchases by the issuing bank. Two years ago only 10 of the largest 100 department stores accepted bank credit cards, whereas 23 did in the last part of 1976 (*2*). Merchants must pay the card issuer a certain percentage of purchases charged on bank cards as a service fee, and some department stores not accepting bank credit cards may feel that they can profit more by issuing their own store credit card.

At the end of 1976, over $11 billion was outstanding on bank credit card accounts, and over $19 billion was outstanding on consumer installment credit owed to retailers, of which an estimated three-fourths was attributable to credit cards (*1*). These amounts do not include noninstallment credit outstanding on 30-day charge accounts.

Approximately 80 percent of married Americans in a nationwide survey conducted in 1973 said they had some type of credit cards (*7*). Over two-thirds of those surveyed felt

[1] Numbers in parentheses refer to References at the end of this article.

credit cards made it too easy to buy items on impulse. The persons surveyed also indicated that credit cards were "useful in emergencies," "good when traveling," "quick credit indentification," and "safer than carrying cash"; suggesting that credit cards are thought of as a convenience rather than as a form of debt.

Costs of Credit Card Accounts

By offering credit card services to its customers, a retail establishment increases its operating expenses and hopes to cover these expenses through finance charges received from the cardholders. Since net profit yields on credit card accounts are often low or nonexistent, some economists fear the additional costs of offering credit cards are borne by all customers, including those who always pay cash. One right of cash customers was maintained by the Federal Fair Credit Billing Act, which became effective in 1975 and included a provision that a bank card issuer could not restrict a seller from offering discounts for cash (*5*). Some credit card companies, such as American Express, Diners Club, and Carte Blanche, charge a yearly membership fee to help defray their expenses, and one New York bank charges customers 50 cents per month when they pay their bill in full (*3*). On the other hand, a few credit card services now offer a 1 or 2 percent rebate on all purchases charged regardless of whether the customer pays his account in full or in installments (*6*).

Most credit card accounts not paid in full by the end of the billing period will incur a finance charge. The Federal Truth in Lending laws require that the consumer's monthly billing statement include the dollar finance charge and the annual percentage rate. State laws determine maximum rates of interest. The usual rates charged on credit card accounts are 18 percent on amounts under $500 and 12 percent on amounts over $500, although certain States require variations to these amounts.

The annual percentage rate is only one indication of cost. Another determinant of how much a credit card account will cost is the method by which the finance charge is computed. Although many methods exist, the two methods used most frequently are (1) previous balance less payments and credits (used mostly by oil companies and small department stores) and (2) average daily balance (used mostly by bank credit card companies and major department stores). These two methods of computing finance charges are compared below using the following hypothetical record of purchases and payments. A monthly interest rate of 1.5 percent (18 percent per year) is assumed.

Date	Payments	Purchases	Balance
June 1			$200
10	$100		100
20		$200	300
30			300

Previous balance less payments and credits. With this method the $100 payment is subtracted from the $200 balance of the previous month. The unpaid balance of $100 is multiplied by the monthly rate of 1.5 percent, which results in a finance charge of $1.50.

Average daily balance. The computation of the finance charge under the average daily balance method is somewhat more complicated since every transaction and every day in the period can be taken into account. The usual method of computing the average daily balance is to sum the account balance at the end of each day in the period, and divide by the number of days in the period. There is, however, considerable variation depending on whether new purchases charged to the account during the current billing period are included in the daily balances.

If current purchases are included, the hypothetical account shown above has a balance of $200 for the first 10 days, $100 for the second 10 days, and $300 for the third 10 days. The sum of the daily balances is $6,000 (200 X 10 + 100 X 10 + 300 X 10), which when divided by the 30 days in the period results in an average daily balance of $200. This balance ($200) multiplied by the monthly rate (1.5 percent) results in a finance charge of $3.00.

If current purchases are excluded in computing the average daily balance, this account has a balance of $200 for 10 days and $100 for 20 days, resulting in an average balance of $133.33 ($4,000 ÷ 30 days). The finance charge would be $133.33 times 1.5 percent or $2.00.

In these examples, the finance charges computed under the average daily balance methods are greater than those computed under the previous balance method, and this would be true in most cases. The average daily balance may not be as advantageous to the consumer as some methods, but it is the most fair to both creditor and debtor, since the consumer pays for the exact amount of the credit he receives.

Managing Credit Card Accounts

By taking advantage of the features of his credit cards, a consumer can minimize the cost of his accounts and maximize his spending power. A consumer who always just makes the minimum payment required and who keeps a constantly high credit balance may find the accumulated finance charges on his account to be almost as costly as his purchases. Managing an account in such a manner would result in the account never being fully paid up.

By watching an account's closing date, a consumer can extend the time between a purchase and the payment. Purchases made before the closing date will show up on the next bill, but purchases made just after the closing date won't show up until the second bill follows. Generally consumers have 25 to 30 days from the closing date to pay their bills. Persons who wait until almost the last day to pay get an additional "free ride," but if time is not allowed for postal handling and company processing, the delay may cost more than the possible savings. A consumer who expects to pay a finance charge computed under an average daily balance method will pay less by minimizing the number of days his purchases are on the account.

Paying bills in person instead of by mail can save delays and postage, but not if additional money is spent in travel to the bank or on additional impulse items when visiting the store. Lumping purchases onto one card rather than spreading them among many cards can save money in more than just postage and minimum finance charges. Most credit cards have a breakpoint such as $500 at which the interest rate becomes lower. If a consumer were to charge $800 in one month and have the entire amount on one card, he would be charged a lower rate of interest on the amount over $500 than if he had spread $800 worth of purchases on several cards.

Most credit cardholders have more than one card and could use a system to make sure all bills get paid on time. A common method to handle bill paying is: Save credit slips received at the time of purchase to compare with the monthly billing statement and check for errors; place bills to be paid in a spot where they will not be forgotten and mark their due date on a calendar; specify a certain day to pay bills, such as the day a bill is received or the day a paycheck arrives; and save paid bills for future reference.

Many sources suggest that a consumer have a list of all his credit card account numbers and company addresses and telephone numbers in case his cards are lost or stolen. Most companies inform their cardholders what to do when their card is missing, and some provide postage-paid cards or toll-free telephone numbers for this purpose. Cardholders may be liable for up to $50 in unauthorized charges made on their card unless they notify the company immediately when their card has been lost or stolen.

For a consumer who has many credit cards, the loss of a wallet or purse could mean much time spent in notifying all the credit card issuers affected. For this reason, credit card services now exist so that all companies would be notified of lost credit cards through just one phone call from the consumer to the credit card service. For a fee, such services not only handle notification for and replacement of lost or stolen cards for their members but also can offer emergency cash and airline tickets for stranded travellers, change-of-address services, and fraud warning labels to be affixed to credit cards as a deterrent against unauthorized persons using the cards.

Credit card companies are required to notify customers as to what action to take in case of billing errors. Procedures to handle billing mistakes are outlined in the Federal Fair Credit Billing Act so that disputes may be settled promptly and fairly. Deadlines and other specifications pertaining to errors can vary from State to State.

Cash Loans on Credit Card Accounts

A recent innovation is the use of credit cards to obtain cash in the form of a loan or advance. Cardholders present their cards at designated

locations, such as banks or airports, and charge the cash they receive much the same as they would charge merchandise in a department store. The credit conditions for a cash advance are generally different from those for purchasing merchandise, usually with the finance charges beginning the day the cash advance is made. Also, any payments the customer makes to his account are first applied to cash advances and finance charges and then to charges for merchandise or services. On some accounts a processing fee is charged for each cash advance, and some companies require that cash be loaned only in certain increments, such as $100. Conditions for both cash and sales charges will vary among credit card companies and among issuers of the same credit card.

References

(1) Board of Governors of the Federal Reserve System. 1977. Consumer installment credit (table). *Federal Reserve Bulletin* 63 (2): A42.

(2) *Business Week.* 1976. Bank cards push for the big stores. 2451: 107-108.

(3) *Consumer Reports.* 1976. Citibank finds a penny it forgot to pinch. 41 (7): 375.

(4) *Consumers Research Magazine.* 1976. Buying on credit. 59: 41.

(5) *Family Economics Review.* Fair Credit Billing Act. Fall 1975 issue, p. 36.

(6) *Forbes.* 1976. The new zig and zag in credit card marketing. 117: 50.

(7) Hawes, D. K., Blackwell, R. D., and Talarzyk, W. W. 1976-77. Attitudes toward use of credit cards: Do men and women differ? *Baylor Business Studies* 110: 57-71. (Waco, Texas: Baylor University.)

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HOW FOOD DOLLARS WERE DIVIDED, 1965 AND 1975

by Cynthia Cromwell and Richard Kerr

There appear to be many reasons why consumers may have altered their food purchasing patterns over the past 10 years: Increases in food prices, new products on the market, larger number of families receiving food stamps and other food assistance, and shifts in the makeup of the population. A study of two annual consumer expenditure surveys conducted by SUPERMARKETING[1] magazine indicates, however, that Americans allocated their food dollars among major categories of food in much the same way in 1975 as they did in 1965. This was true whether the share of the food market was compared when foods were categorized by the basic four food groups or by degree of processing of the food.

In each survey, consumption—whether at farm level or by institutions, restaurants, government, or households—was included in terms of retail store valuation. Excluded were those portions of a commodity which were used commercially in making some other products, such as the portion of flour output which was used in baked goods reported. Also excluded were infant formula and alcoholic beverages.

Basic Four Food Groups

In the first comparison all food, whether fresh, processed, or ready-to-eat, was sorted into the basic four food groups and the "other foods" group as specified in The Daily Food Guide, USDA Leaflet 424 (table 1). Foods that did not fall clearly into one of these groups were included in either the mixtures or accessories group. In both 1965 and 1975 consumers allocated the largest share of their food money for meat and alternates—more than twice as much as the next highest group. They spent $37-$38 of every $100 for meat, poultry, eggs, dry beans and peas, and nuts; $17-$18 for vegetables and fruit; $12-$13 for milk and dairy products, such as cheese and ice cream; and $6-$7 for flour and those cereals and breads believed to be whole grain, enriched, or fortified. A little over $12 went for "other foods"—refined and unenriched bakery products, butter, margarine, oils, sugar, sirups, and molasses, for example. About $7-$8 per $100 was spent on accessories such as coffee, tea, soft drinks, seasonings, and the like.

Foods bought as commercially prepared mixtures (that contained foods from two or more of the Daily Food Guide groups) claimed less than $5 per $100 in 1965 and less than $6 in 1975. This group includes frozen dinners, meat and poultry pies, breaded fish sticks and shrimp, and frozen, canned, and dried soups. It contains other mixtures, such as jellies and jams and fruit drinks that have fruit and sugar in them, and pudding mixes and breakfast drinks that contain milk, sugar, and other foods. This mixtures group does not include mixtures that are identified in the guide as a part of a group, such as ice cream in the milk group and ready-to-eat cereals that contain sugar in the bread-cereal group. The continued relative unimportance of mixtures that cut across food groups offsets to some extent the concern of some people that the use of ready-prepared and partly prepared mixtures makes the Daily Food Guide inappropriate as a tool for food selection.

Degree of Processing

Because supermarkets now display many more processed and "convenience" foods than several years ago, the assumption is sometimes made that the U.S. diet is fast approaching a diet of highly processed foods. However, when the share of food dollars was compared for foods organized by four degree-of-processing categories, plus an accessories group, minimal change was found between 1965 and 1975 (table 2). There was almost no change in the amount allotted to fresh, unprocessed foods; cured, frozen, canned, dried, or refined foods with little change; mixes and mixtures, ready-to-eat or ready-to-heat; and accessories. One category, modified foods with minor ingredient

[1] Formerly called *Food Topics*. Basic data from 19th Annual Study: What Consumers Spend, *Food Topics*, September 1966; and 29th Annual Consumer Expenditures Study, *Supermarketing*, September 1976.

added, showed an 11 percent increase in the share of food dollars allotted between 1965 and 1975—mostly because of increases for process cheese and ready-to-eat cereal.

Fresh, unprocessed foods continue to be highly popular. They accounted for 46 percent of the food dollars spent in 1965 and again in 1975. This was more than twice as much as any other of the degree-of-processing categories.

The Department's Economic Research Service also conducted a study using data from SUPERMARKETING magazine. They found similarity in 1952, 1971, and 1975 in the share of food dollars going to processed versus unprocessed foods.[2]

[2] USDA, Economic Research Service, National Food Situation, NFS-159, p. 34, Mar. 1977.

Individual Food Items

The small change between 1965 and 1975 in the way consumers divided their food money among categories of foods masks changes for some individual food items. Some took a substantially greater or lesser share of food dollars in 1975 than they did in 1965 (table 3). For example, the shares going to presweetened cocoa and to process cheese increased more than 100 percent; oils and sugar, about 60 percent; and margarine and ready-to-eat cereal, 40-45 percent. The shares for frozen plate dinners, entrees, and soups, and fresh vegetables (excluding potatoes) each increased about 20-25 percent. However, less than $1 for every $100 worth of food was allocated for each of these foods and, therefore, the substantial percentage increases for these individual foods had only a small impact on their group or category.

Table 1. Share of food dollars by Daily Food Guide groups, 1975 and 1965

Food group [1]	Share of each $100 worth of food [2]		Change from 1965 to 1975
	1975	1965	
	Dollars		*Percent*
Total	100.00	100.00	
Milk	12.09	12.99	- 7
Meat and alternates	37.29	37.65	- 1
Vegetable-fruit	17.80	17.32	+ 3
Bread-cereal	6.77	7.09	- 5
Other foods	12.62	12.47	+ 1
Mixtures from 2 or more groups [3]	5.74	4.84	+19
Accessories [4]	7.69	7.64	+ 1

[1]Foods are sorted by food group as specified in The Daily Food Guide, USDA Leaflet 424, insofar as possible.

[2]All consumption--whether at farm level or by institutions, restaurants, government, or households--is given in terms of retail store valuation. Excluded are those portions of a commodity used commercially in making some other products, such as the portion of flour output used in baked goods reported as consumed. Also excluded are infant formulas and alcoholic beverages.

[3]Frozen prepared foods such as dinners and meat and poultry pies; fish sticks and breaded shrimp; frozen, canned, and dried soups; jellies, jams, and preserves; pudding and custard mixes; toppings; sauces and gravy mixes; dry potato mixes; canned and frozen fruit drinks; prepared food drinks, breakfast drinks; other new food products not classified.

[4]Coffee, tea, cocoa; soft drinks; leavening agents, flavorings, condiments.

Source: *Food Topics*, 19th Annual Study: What Consumers Spend, September 1966 issue; and *Supermarketing* (formerly called *Food Topics*), 29th Annual Consumer Expenditures Study, September 1976 issue.

Table 2. Share of food dollars by degree of processing, 1975 and 1965

Processing [1]	Share of each $100 worth of food [2]		Change from 1965 to 1975
	1975	1965	
	Dollars		*Percent*
Total	100.00	100.00	
Fresh, unprocessed (Milk, cream; meat, poultry, seafood, nuts, eggs; vegetables and fruit)	45.75	46.35	- 1
Cured, frozen, canned, dried, or refined with little change (Evaporated and dry milk, natural, cottage, and pot cheese; cured pork and fish, bacon, frozen and canned meat, poultry, seafood--not breaded, canned and dry beans and peas; frozen, canned, and dry vegetables; frozen and dried fruits; flour, meal, hot cereals, rice, macaroni products, infant cereals; fats, oils, sugar, sirup, molasses)	17.31	17.43	- 1
Modified, with sugar or other minor ingredient added (Condensed milk, process cheese; frankfurters, cold cuts, other sausage products, peanut butter; canned fruit, frozen fries and other potato products, olives, pickles, relish; cereals, ready-to-eat)	9.27	8.35	+11
Mixes and mixtures, ready-to-eat or ready-to-heat (Ice cream, ready whipped topping; frozen dinners, meat and poultry pies, soups, etc., baby meat and combinations, fish sticks, and breaded shrimp; instant potato mixes, chips; canned soups; bread and rolls, crackers, biscuits, cookies, tidbits, frozen and ready-to-eat sweet bakery goods, prepared cake and other mixes; salad dressings, jams, jellies, preserves, candy, gelatin desserts and puddings, frosting mixes, soup mixes, toppings, gravy mixes, fruit drinks, breakfast drinks; all other new products not classified)	19.98	20.23	- 1
Accessories (Coffee, tea, cocoa; soft drinks; leavening agents, flavorings, condiments)	7.69	7.64	+ 1

[1]Foods were arbitrarily classified into 4 categories by degree of processing.

[2]All consumption--whether at farm level or by institutions, restaurants, government, or households--is given in terms of retail store valuation. Excluded are those portions of a commodity used commercially in making some other products, such as the portion of flour output used in baked goods reported as consumed. Also excluded are infant formulas and alcoholic beverages.

Source: *Food Topics*, 19th Annual Study: What Consumers Spend, September 1966 issue; and *Supermarketing* (formerly called *Food Topics*), 29th Annual Consumer Expenditures Study, September 1976 issue.

Table 3. Share of food dollars in 1975, and percent change from 1965 for selected foods

Food	Share of each $100 worth of food, 1975 [1]	Change from 1965 to 1975
	Dollars	*Percent*
Presweetened cocoa	0.11	+120
Process cheese	.96	+113
Oils	.42	+ 62
Sugar	1.54	+ 62
Margarine	.93	+ 45
Cereal, ready-to-eat	1.00	+ 41
Natural cheese	.86	+ 32
Dry milk	.09	+ 29
Salad dressings	.58	+ 29
Plate dinners, entrees, soups, frozen	1.34	+ 26
Rice	.25	+ 25
Juices, frozen	.58	+ 21
Potato chips	1.11	+ 21
Fresh vegetables, not potatoes	7.74	+ 20
Condensed milk	.01	- 67
Lard	.15	- 55
Cream, fresh	.26	- 46
Butter	.71	- 43
Evaporated milk	.24	- 31
Cornmeal, hominy	.11	- 27
Dry beans, peas	.34	- 26
Sweet bakery goods, ready-to-eat	1.89	- 24
Eggs, shell	2.16	- 23
Potatoes, fresh	1.29	- 19
Pork and beans, canned	.18	- 18
Flour	.37	- 16
Ice cream	1.62	- 16

[1]All consumption--whether at farm level or by institutions, restaurants, government, or households--is given in terms of retail store valuation. Excluded are those portions of a commodity used commercially in making some other products, such as the portion of flour output used in baked goods reported as consumed. Also excluded are infant formulas and alcoholic beverages.

Source: *Food Topics*, 19th Annual Study: What Consumers Spend, September 1966 issue; and *Supermarketing* (formerly called *Food Topics*), 29th Annual Consumer Expenditures Study, September 1976 issue.

Fresh vegetables accounted for almost 40 percent of the vegetable-fruit group, so the 20-percent increase between 1965 and 1975 in the share of food dollars for fresh vegetables had considerable influence on change in the total vegetable-fruit group in table 1.

Food with large decreases in 1975 in their share of food dollars included condensed milk, down 67 percent; lard and fresh cream, each down about 50 percent; butter, down 43 percent; cornmeal and hominy, dry beans and peas, ready-to-eat sweet bakery goods, and eggs in the shell, each down about 25 percent. As most of these individual food items also took less than 1 percent of the 1975 market, their decrease had little impact on their respective food group.

Limitations of Study

These comparisons were estimated for the country as a whole. Families of certain sizes or at certain economic levels may have changed their food purchasing patterns in various ways—some more and some less than these averages indicate. For example, one family may have shifted almost entirely from fresh foods to highly processed ones, while another may have shifted from processed to fresh ones. Answers to questions about how individuals and households have modified their food consumption since 1965 will be answered by the 1977-78 Nationwide Food Consumption Survey now in progress.

The comparisons were for the share of consumption in terms of money value of foods at the time. Prices for most foods increased between 1965 and 1975 but not uniformly. Therefore, changes, or lack of them, were partly due to changes in the amount of the food used and partly due to the changes in relative prices.

In Conclusion

This study shows that U.S. consumers allocated their food dollars in 1975 much as they did in 1965. They continued to allot well over one-third to meat and meat alternates in 1975. They showed a slight tendency toward a lower allocation of funds for the milk and bread and cereal groups, offset by increases for prepared and partly prepared mixtures. Consumers also continued to show a preference for fresh foods—milk, meat, poultry, seafood, nuts, eggs, vegetables, and fruit—allocating almost half of their food money to these foods.

FARM POPULATION OF THE UNITED STATES: 1976

Approximately 8¼ million persons, or 3.9 percent of the total U.S. population, lived on farms in April 1976.[1] Continuing a long-term downward trend, the 1976 estimate was about 600,000 or 6.9 percent smaller than in 1975, and almost 1.5 million or 15 percent lower than in 1970. The average annual decline in the total farm population between 1970 and 1976 was 2.7 percent; however, the rate of loss differed significantly between white and black farm residents—2.2 and 9.2 percent, respectively.

Since 1970, the number of farm children under 14 years of age has dropped by a third, and their proportion of all farm people has declined from 26 to 20 percent. During this same period the number of farm persons 14 years old and over decreased only 9 percent. Much of the decline in children since 1970 can be attributed to the sharp drop in the birth rate.

[1] Figures are based on the definition of "farm" used from 1960 to 1975 by the U.S. Department of Agriculture and the U.S. Department of Commerce.

Source: U.S. Department of Commerce, Bureau of the Census. 1977. *Current Population Reports*, Series Census—ERS P-27, No. 48.

RETIREMENT HISTORY STUDY

To assess the Social Security program's provisions for retired workers and to learn about patterns of retirement and the relationship of retirement to other changes that take place among persons in their sixties, the Social Security Administration (SSA) is conducting a 10-year longitudinal study of the retirement process. This article summarizes, from published SSA reports, the kind of information being collected and gives a few preliminary findings from the early years.

In spring of 1969, the first data were collected from 11,153 persons who were born between 1905 and 1911 (persons aged 58 to 63 in 1969). Subsequent data collections were at 2-year intervals and will continue until the respondents reach the 68 to 73-year age group. After 10 years the sample size is expected to be about 50 percent of the original because of death, respondent movement, or dropout. The sample selected for the study includes married men, and men and women who were not married at the time of the initial sampling. Married women were excluded because preliminary interviews found most married women of this generation identify their retirement with their husbands' retirement.

Characteristics in 1969

Work life. The study defined retirement as the stoppage of work by persons past age 55 or 60. The respondents were asked to define their work status as completely retired, partly retired, or not retired. In 1969, 17 percent of the entire sample described themselves as completely retired and 9 percent said they were partly retired. Women were more likely not to be working (42 percent) than were men (16 percent). Married men were more likely to be working full time than men with no wives present—77 percent of the men with wives in the household were working full time as compared with only 59 percent of the men with no wives present.

Twenty-two percent of the workers in the sample in 1969 reported earnings at the rate of at least $10,000 a year; 7 percent were earning less than $2,500. Of the working women, 4 percent were earning at the rate of $10,000 or more at the time of the survey; 24 percent earned less than $2,500.

Health. Data on the health status of respondents were obtained by self-assessment, that is, how respondents rated their health compared with other persons in their same age group. Also, respondents were asked about their work and mobility limitations, expenditures and insurance for health care, and need for medical attention. Sixty-nine percent of those who reported themselves as completely retired in 1969 left their last jobs because of poor health. Of those reported as partly retired, 49 percent cited health as the reason. Three-fourths of the respondents considered themselves as healthy as or healthier than other people their age (see table). More than three-fifths of the married men and the unmarried women reported no physical or job-related disabilities in 1969. Only about half of the men without spouses reported no disabilities.

The deterioration of health that comes with the aging process may change the expenditures for medical care of persons in the sample. Medical insurance plans and benefits often stop, become limited, or cost more to continue after retirement. Not only the changes in expenditures for medical care due to anticipated poorer health, but also the shifts in the manner of paying for medical services and the extent to which current public health insurance programs (Medicare) are meeting the financial as well as medical needs of older persons will be observed in the Retirement History Study (RHS).

Living arrangements. Ninety-seven percent of the sample lived in houses or apartments in 1969. The rest lived in hotels, rooming houses, or trailers. About 9 percent lived on farms. A small percentage at ages 58 to 63 had their housing paid for, all or in part, by other family members. More than half of the respondents lived alone (or with spouse only in the case of married men); about one-third of those with children reported any living in the household. The nonmarried women tended to have more

rooms per person in the household than the other groups. This can be explained in part by the number of widows (64 percent of the women on the panel), many of whom were living in the family house.

As respondents age, the various components of housing status such as space requirements, mobility of older persons, and companionship needs can be expected to change. To study these changes, respondents have been asked to report on the employment of outside household help, the presence of elderly parents or other relatives or nonrelated persons in the household, whether any support is given to or received from relatives, and the degree of communication between respondent and relatives outside the household.

Expenditures. Differences in spending patterns associated with income level have been revealed in many cross-sectional surveys. However, the longitudinal data of the Retirement History Study should provide a clearer picture of the changes in spending patterns, as persons go from preretirement to retirement and experience changes in income and activity. Monitoring expenses, along with the personal information gathered in the study over the 10-year period, will also provide information on the style of living outside of working life in the later years and may lead toward improved social welfare programs for the Nation's older population.

Expenditures for housing, which include taxes, insurance, and utilities, may cause financial strain because of diminished and possibly fixed incomes and rising prices. Market values are increasing rapidly, which means that an owned home in retirement can be a greater financial asset than anticipated when purchased. However, higher taxes, which come with increased market value, may counterbalance the financial advantage of homeownership in the retirement years. An evaluation of the extent to which home ownership is an investment and the extent to which it is a financial burden in later years may be possible through the RHS.

Food expenditures generally show little immediate response to changes in income, although some "luxury" foods are usually cut out as income declines. Another factor affecting food expenditures in retirement may be a reduction in food purchased at work. Food

Health self-assessment of persons 58 to 63 years old in 1969

Item	Spouse present	No spouse present	
	Men	Men	Women
	Percent		
Self-reported health status:			
Better than others of same age	35	28	35
Same as others of same age	42	41	39
Worse than others of same age	19	27	20
Don't know	3	4	5
Work limitations:			
No limitations	63	53	61
Mobility limitation only	4	2	3
Work limitation	33	44	36

Source: Motley, D.K. 1972. Health in the years before retirement. *Social Security Bulletin* 35 (12): 18-36. U.S. Department of Health, Education, and Welfare, Social Security Administration.

purchased for use at home generally costs less than food purchased away from home; as more meals are prepared at home and as lower caloric needs of older, less active persons are taken into account, per person food costs may decrease. On the other hand, if dining out becomes a leisure-time activity, food costs may increase.

Transportation costs can be expected to change with the retirement process since there are no longer costs of commuting to and from work. However, with the retirement process may come new transportation needs and costs. Recreational travel may be an added component of transportation expense, particularly among higher income groups. A change of locale (moving to a new area) may affect transportation costs. Finally, declining mobility that comes with the aging process will change the transportation needs of this group.

Changes in 1973

Over the 4-year period from 1969 to 1973, the proportion of men working declined from 84 percent to 47 percent. Among the women interviewed, only 33 percent were working in 1973 compared with 58 percent in 1969. Two percent of the respondents were not working in 1969 but were reported working in 1973. Nearly one-fifth of the full-time workers switched to part-time during this 4-year period. Cessation of work was accompanied by a reduction in total income of about 40 to 45 percent, measured in constant dollars, over the 4-year period.[1] This meant that the purchasing power of retirees interviewed in 1973 was barely over half their purchasing power in the 4 years earlier. Nonmarried men were much better off before they stopped working than nonmarried women, but afterward the incomes of both groups were approximately the same.

A much larger proportion of women than men moved to a different housing unit between 1969 and 1973. Thirty percent of the men's households and 40 percent of the women's households included an adult relative in 1969. This had dropped to 8 percent and 23 percent, respectively, by 1973. Sixteen percent of the nonmarried men had married by 1973; few women had.

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[1] Based on the total income for the years immediately prior to reporting periods.

Sources: U.S. Department of Health, Education, and Welfare; Social Security Administration, *Social Security Bulletins:* Bond, K., 1976, Retirement History Study's first four years: Work, health, and living arrangements, 39 (12): 3-14, 40; Fox, A., 1976, Work status and income change, 1968-72: Retirement History Study preview, 39 (12): 15-31; Irelan, L. M., 1972, Retirement History Study: Introduction, 35 (11): 3-8. Irelan, L. M., Motley, D. K., Murray, J., Schwab, K., and Sherman, S. R., 1976, Almost 65: Baseline data from the Retirement History Study, U.S. Dept. Health, Ed., and Welfare, Social Security Admin., 165 pp.

SOCIAL WELFARE EXPENDITURES, FISCAL YEAR 1976

Expenditures under public social welfare programs during fiscal year 1976 rose 15.7 percent or $45 billion, down moderately from the 19.7 percent increase and record dollar advance of $47 billion recorded a year earlier. As in 1975, two major factors in the abnormally high rate of increase were the continued efforts of the Government to cope with the 1974-75 recession and the continuing inflation. Benefits for the needy and the unemployed expanded further, while higher prices triggered cost-of-living adjustments in cash benefits and added to the cost of providing social welfare services.

Expenditures for social insurance programs (OASDHI—old-age, survivors, disability, and health insurance; railroad and public employee retirement; unemployment insurance; and workmen's compensation) accounted for 44 percent of the total bill for social welfare. Aid to education accounted for 26 percent, and

Social welfare expenditures, fiscal year 1976

Program	Million dollars	Percent distribution	Percent increase, 1975-76
Total social welfare	331,366	100	15.7
Social insurance	146,592	44	19.2
Public aid	48,946	15	20.2
Health and medical programs	19,193	6	10.1
Veterans' programs	19,006	6	11.7
Education	86,426	26	10.9
Housing	3,127	1	5.4
Other[1]	8,076	2	7.2

[1]Housing, vocational rehabilitation, institutional care, child nutrition, child welfare, and special programs.

Source: Skolnik, A.M., and Sophie, R.D. 1977. Social Welfare expenditures, fiscal year 1976. *Social Security Bulletin* 40 (1): 3-19. U.S. Department of Health, Education, and Welfare; Social Security Administration.

public aid (public assistance, supplemental security income, food stamps, and emergency employment and manpower training program) for 15 percent (see table).

The largest growth between 1975 and 1976 was for unemployment insurance and employment security programs: an increase of 43 percent. Public aid programs rose 20 percent during the year. Increases in unemployment insurance and public aid were directly affected by the 1974-75 recessions and Government efforts to cope with it. Other income-maintenance programs saw large increases because of cost-of-living adjustments triggered by inflation.

The combination of recession and inflation made social welfare expenditures grow at a faster pace than the economy. Such expenditures were 20.6 percent of the gross national product (GNP) in 1976, up from 17.6 percent in the prerecession year of 1974.

The impact of these higher social welfare expenditures continued to be felt chiefly by the Federal Government. Three-fifths of all public expenditures for social welfare purposes were federally funded in 1976, compared with 58 percent in 1975 and 53 percent in 1970; the balance was funded through State and local governments. The amount spent for social welfare absorbed 56 percent of the Federal budget in 1976, compared with 54 percent in 1975 and 40 percent in 1970. State and local jurisdictions also experienced an upward trend, although to a much lesser degree, reporting 67 percent of their expenditures devoted to social welfare in 1976 and 64 percent in 1970.

Source: Skolnik, A. M., and Sophie, R. D. 1977. Social welfare expenditures, fiscal year 1976. *Social Security Bulletin* 40 (1): 3-19. (U.S. Dept. of Health, Education, and Welfare. Social Security Administration.)

LENGTH OF WORKING LIFE, 1970

In 1900, men averaged five times as many years in the labor force as women; by 1970 that ratio had fallen to less than twice as many years. The ratio would be even lower except that many married women still interrupt their careers to have children, to move to new locations with their husbands, or for other reasons. Women also tend to retire somewhat earlier than men, at an average age of about 60 years.

The average number of years spent in the labor force by men rose from 32.1 in 1900 to 41.5 in 1950, but declined slightly to 40.1 by 1970—mostly because of a slow decline in labor force participation among men over age 55. While working-life expectancy of men has increased about 10 years since 1900, life expectancy at birth has climbed by almost 20 years—from 48.2 to 67.1. Thus, the average time not in the labor force has risen dramatically. Practically all of the nonwork activity of men at the turn of the century occurred before they entered the labor force. Now a large proportion of the nonwork years are spent in retirement, although an extended period of education has also delayed labor force entry for many men.

Since 1900 the overall life expectancy of women has increased from 50.7 years to 74.8 years, almost 50 percent. Of the 24 additional years, over two-thirds have been added to working life. The worklife expectancy of women climbed from 6.3 to 22.9 years between 1900 and 1970. After 1950 the worklife expectancy among women rose at a faster rate than overall life expectancy, and time spent out of the labor force began to decline.

Source: U.S. Department of Labor, Bureau of Labor Statistics. Length of working life for men and women, 1970. *Special Labor Force Report 187.* (Revised and reprinted from Feb. 1976 *Monthly Labor Review.*)

MARITAL COMPOSITION OF THE LABOR FORCE

Married persons' share of the labor force has been declining in recent years, while that of unmarried persons has been increasing. From March 1970 to March 1976, married persons' share of the labor force dropped from 69.2 to 64.7 percent. Over this same period, the proportion of persons in the work force who have never been married grew from 20.1 to 23.2 percent, and that of divorced and separated persons rose from 6.8 to 9.2 percent. Several factors accounted for this gradual change in the profile of the labor force: The continuation of the long-term decline in the participation rate of married men, which was not completely counterbalanced by the rise for married women; and the rapid increase of young people in the population and in the labor force, many of whom are remaining single longer.

There were 14.9 million mothers in the labor force in March 1976, 11.7 million of whom were married and living with their husbands. The labor force participation rate for wives with children under 18 years old rose to 46.1 percent in March 1976, while the rate for wives without children remained the same—43.8 percent. About 74 percent of divorced mothers with children under 18 were in the labor force, as were about 50 percent of widowed mothers and 45 percent of never-married mothers.

Source: U.S. Department of Labor, Bureau of Labor Statistics. Married persons share of the labor force declining, BLS study shows. U.S. Dept. of Labor Press Release No. 77-191, March 1977.

Cost of food at home estimated for food plans at 4 cost levels, June 1977, U.S. average[1]

Sex-age groups	Cost for 1 week				Cost for 1 month			
	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars				*Dollars*			
FAMILIES								
Family of 2:[3]								
20-54 years	23.60	31.20	39.20	47.10	102.40	135.50	170.00	204.10
55 years and over	21.20	27.90	34.60	41.40	92.20	121.20	149.70	179.30
Family of 4:								
Couple, 20-54 years and children--								
1-2 and 3-5 years	33.20	43.40	54.10	65.00	144.00	188.20	234.90	282.00
6-8 and 9-11 years	40.00	52.30	65.60	78.80	173.20	226.60	284.40	341.50
INDIVIDUALS[4]								
Child:								
7 months to 1 year	4.70	5.80	7.10	8.40	20.50	25.20	30.90	36.60
1-2 years	5.30	6.80	8.40	10.00	23.00	29.60	36.50	43.50
3-5 years	6.40	8.20	10.10	12.20	27.90	35.40	43.90	53.00
6-8 years	8.20	10.60	13.30	16.00	35.50	46.00	57.70	69.30
9-11 years	10.30	13.30	16.70	20.00	44.60	57.40	72.20	86.70
Male:								
12-14 years	11.00	14.10	17.70	21.20	47.50	61.00	76.50	91.90
15-19 years	12.10	15.60	19.60	23.60	52.30	67.60	84.70	102.10
20-54 years	11.80	15.60	19.70	23.80	51.10	67.50	85.40	103.00
55 years and over	10.50	13.80	17.20	20.70	45.60	59.90	74.30	89.60
Female:								
12-19 years	9.80	12.70	15.70	18.80	42.50	54.80	68.00	81.30
20-54 years	9.70	12.80	15.90	19.00	42.00	55.70	69.10	82.50
55 years and over	8.80	11.60	14.30	16.90	38.20	50.30	61.80	73.40
Pregnant	12.30	15.90	19.50	23.20	53.40	68.80	84.60	100.60
Nursing	13.00	16.80	20.90	24.90	56.40	72.80	90.70	107.70

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1976 (thrifty plan) and Winter 1975 (low-cost, moderate-cost, and liberal plans) issues of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households from USDA's Household Food Consumption Survey with food costs at 4 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" released monthly by the Bureau of Labor Statistics.

[2]Coupon allotment in the Food Stamp Program based on this food plan.

[3]10 percent added for family size adjustment. See footnote 4.

[4]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

CONSUMER PRICES

Consumer price index for urban wage earners and clerical workers

(1967 = 100)

Group	June 1977	May 1977	April 1977	June 1976
All items	181.8	180.6	179.6	170.1
Food	193.6	191.7	190.9	180.9
Food at home	191.9	189.8	189.3	179.7
Food away from home	200.6	199.3	197.5	185.6
Housing	189.0	187.6	186.7	176.5
Shelter	190.3	188.9	187.7	178.2
Rent	152.9	152.2	151.6	144.4
Homeownership	203.9	202.3	201.0	190.7
Fuel and utilities	201.8	200.2	199.4	181.7
Fuel oil and coal	283.1	282.6	282.0	247.3
Gas and electricity	213.0	210.9	209.8	188.5
Household furnishings and operation	177.1	175.9	175.4	168.5
Apparel and upkeep	153.9	153.4	152.3	146.9
Men's and boys'	153.8	154.3	153.1	146.7
Women's and girls'	146.0	144.7	143.6	140.9
Footwear	156.8	157.0	156.2	149.5
Transportation	179.2	178.2	176.8	165.9
Private	178.7	177.8	176.3	165.0
Public	183.2	181.5	180.4	173.6
Health and recreation	173.2	172.3	171.4	162.8
Medical care	201.8	200.5	199.1	183.7
Personal care	170.6	169.5	168.4	159.8
Reading and recreation	157.6	156.8	156.0	150.9
Other goods and services	158.4	158.0	157.7	153.2

Source: U.S. Department of Labor, Bureau of Labor Statistics.

U.S. WORKERS AND THEIR JOBS: THE CHANGING PICTURE

"U.S. Workers and Their Jobs: The Changing Picture" is a new chartbook issued by the Bureau of Labor Statistics of the U.S. Department of Labor. This brief chartbook is based on data from some of the Bureau's major statistical series and illustrates patterns of change in the American economy and labor force. Colorful charts are used to show movements of wages, prices, productivity, employment, education, and union membership over the years.

The chartbook, Bulletin 1919, is for sale for 60 cents a copy from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock No. 029-001-01917-3).

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FAMILY ECONOMICS REVIEW

HIGHLIGHTS/FALL 1977

CONSUMER INSTALLMENT CREDIT

CREDIT UNIONS

FLAMMABILITY STANDARDS:
A COST BENEFIT ANALYSIS

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CONSUMER INSTALLMENT CREDIT

by Cynthia L. Jennings and Katherine S. Tippett

At the end of 1976 total consumer credit outstanding was almost $218 billion. Of that amount 82 percent ($179 billion) was held as installment credit and 18 percent ($39 billion) as noninstallment credit. Perhaps as an indication of the importance of installment debt in the economy, the Federal Reserve Board, in January 1976, expanded the tables in the FEDERAL RESERVE BULLETIN on consumer installment credit to include data on mobile homes and revolving credit—items previously included in other categories. Data on noninstallment credit were dropped as a separate table but are reported occasionally as a note to the tables on installment credit. Following is a description of recent growth in consumer installment credit and a review of consumer credit laws.

Credit Growth

Total consumer installment credit oustanding was $179 billion at the end of 1976—up $17 billion (or 10 percent) over the previous year. The 1976 increase is the largest since 1972 and 1973 when consumer credit was growing at about 15 percent per year (table 1). Credit growth during the recession years of 1974 and 1975 was about 5 percent per year. At the end of May 1977, total consumer credit outstanding reached $185 billion, an increase of almost 13 percent from May 1976. On a seasonally adjusted basis, consumer credit outstanding increased by record amounts in March, April, and May of 1977.

Table 1. Growth in consumer installment debt outstanding, 1971-77

End of year	Total	Increase from previous year
	Billion dollars	*Percent*
1971	111.2	9.1
1972	126.8	14.0
1973	146.4	15.5
1974	155.4	6.1
1975	162.2	4.4
1976	178.8	10.2
1977 [1]	185.2	[2] 12.9

[1]End of May; increase from end of year 1976.
[2]From end of May 1976.

Source: Federal Reserve Board data.

On a per-person basis, consumers owed about $828 at the end of 1976. Three-fifths of this amount was owed on automobiles and personal loans (table 2). The remaining two-fifths was owed on retail credit (excluding 30-day accounts), revolving credit (bank credit cards and check credit), mobile homes, home improvements, and other consumer goods.

Revolving credit was the fastest growing area of consumer installment credit in 1976. Revolving credit, which includes bank credit cards and check credit, is a separate category from retail credit, which includes installment loans on consumer goods and revolving credit held by department stores, oil and gas companies, and other merchants offering their own credit cards. Between 1975 and 1976 revolving credit increased 14 percent (up from the 10-percent increase of the previous year but down from a high of 21 percent between 1973 and 1974), while retail credit increased only 6 percent. Of total per capita consumer credit oustanding in 1976, retail credit accounted for a larger share than revolving credit (10.7 percent compared with 7.9 percent), although its share has been declining slightly while that for revolving credit has been rising. The growth in the area of revolving credit indicates the importance of "open end" credit to consumers and particularly the convenience of having one credit card that can be used for a variety of goods and services from many different sources.

Automobile credit, which is the largest single component of total consumer installment credit outstanding, increased more than 13 percent in 1976. This is a substantial comeback from the zero (0) increase between 1973 and 1974, resulting from both the recession and the gas shortgage when sales of new and used cars

Table 2. Consumer installment debt per capita, 1976

Type of credit	Total outstanding (end of year)	Distribution	Change from 1975
	Dollars	- - - - - *Percent*	- - - - -
Total	828	100.0	+9.4
Automobile	280	33.8	+13.4
Personal loans [1]	227	27.4	+10.2
Retail credit [2]	89	10.7	+6.0
Other consumer goods	73	8.8	+7.4
Revolving credit [3]	65	7.9	+14.0
Mobile homes	53	6.4	-7.5
Home improvement	41	5.0	+10.8

[1]From commercial banks, finance companies, and credit unions. 80 percent of all credit union credit was assumed to be for personal loans.
[2]Excludes 30-day charge credit held by retailers, oil and gas companies, etc. Includes revolving credit and installment loans on consumer goods.
[3]Bank credit cards and check credit.

Source: Federal Reserve Board data.

declined and consumers purchased less expensive smaller cars.

Per capita credit oustanding for mobile homes, which increased rapidly in the early 1970's, decreased in both 1975 and 1976—the only type of consumer credit to do so. As a share of total per capita debt outstanding, mobile homes decreased from 7.5 percent in 1975 to 6.4 percent in 1976. Limited availability of financing has constrained sales of mobile homes in the past 2 years, a result of increased delinquencies and repossessions of units financed during the boom of the early 1970's. In addition to the tightened credit conditions, several other factors have contributed to the slowdown in sales of mobile homes: Continued high unemployment among younger and lower income households who are most likely to purchase mobile homes, and upgraded construction and safety standards adopted in recent years that have added to the sales price of mobile homes.

The most common source of consumer installment credit in 1976 was commercial banks, which accounted for almost 48 percent of the total per capita debt in 1976. Other holders of credit were finance companies, accounting for 22 percent; credit unions, 17 percent; retailers, 11 percent; and mutual savings banks, savings and loan associations, and auto dealers, 2 percent.

The fastest growing source of credit in 1976 was the credit union. Per capita credit outstanding originating from credit unions increased almost 52 percent between 1973 and 1976 and rose almost 20 percent in 1976 alone. Credit unions are cooperative institutions owned entirely by their member-customers who often have a common bond such as the same place of employment, membership in the same association, or residence in the same well-defined geographic area. Because of this common bond, a credit union is likely to have accurate and useful information about its members that other consumer lenders cannot easily obtain. The common bond aspect of credit unions leads to a lower default rate than for other lenders. This is partially due to social pressures

that induce credit union borrowers to be more conscientious about their loan repayments and partially to widespread availability of payroll deduction plans (especially at occupational credit unions) that significantly reduce collection costs and delinquencies. Also, allegiance to the common bond of association brings volunteer labor to the credit union, and sponsoring organizations provide subsidies. These advantages contribute to overall lower operating costs at credit unions than at other lending institutions, therefore enabling credit unions to offer credit at interest rates that are generally lower than those offered by other lenders.

Per capita debt originating from mutual savings banks, savings and loan associations, and auto dealers increased almost 19 percent in 1976. This compares with a 1975 increase of almost 7 percent and no increase in 1974. Although this represents a substantial increase in credit outstanding from these institutions, the increase has not greatly affected the consumer credit market, since these combined sources of credit account for less than 3 percent of total per capita debt.

Interest Rates

Interest rates for consumer credit may vary depending on the amount or terms of financing, the source of credit, and the type of goods or services purchased. The cheapest form of credit is usually obtained by borrowing against accumulated assets, such as a savings account. Such loans carry an interest rate that is usually several points above the interest rate the savings themselves earn. Credit unions generally offer lower interest rates than most other forms of credit and are prohibited by law from going above 12 percent. Commercial banks and finance companies tend to be more expensive forms of credit, with finance companies generally the most expensive (see chart). In general, large ticket items that have value as collateral, such as automobiles, are subject to lower finance charges. The average annual interest rate for loans on new automobiles in February 1977 was 11.14 from commercial banks and 13.16 percent from finance companies. In contrast, unsecured personal loans are the most expensive, with an average annual interest rate in February 1977 of 13.23 from commercial banks and 20.75 from finance companies.

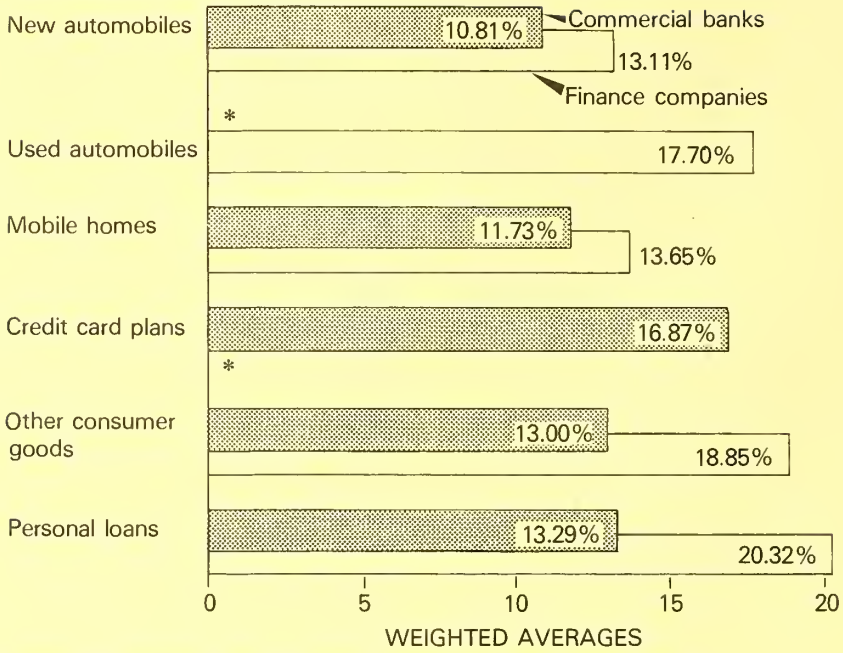
Credit Laws

Before 1969, the regulation of consumer credit was largely left to State legislation. However, in July 1969, the Federal Government entered the consumer credit field with the Consumer Credit Protection Act, commonly called Truth in Lending. In credit transactions the law requires creditors to explain in easily understood language the dollar finance charge and annual percentage rate; the balance on which the charge was figured; the closing date of the billing cycle; and the rights, privileges, and obligations of the credit customer. Since the initial passage of the Truth in Lending law, the Congress has passed a number of changes involving consumer credit, including the credit card provisions of the Truth in Lending Act, the Fair Credit Reporting Act, the Fair Credit Billing Act, the Equal Credit Opportunity Act, and the Consumer Leasing Act. Other amendments to the law include mortgage and real-estate cost disclosure and regulations regarding enforcement by Federal agencies.

The first major change, effective in October 1970, established new provisions relating to credit cards. These provisions ban the unsolicited mailing of credit cards; limit the cardholder's liability to $50 when a card is lost or stolen, with no liability if the issuer of the card is informed before the card is used; require that all cards bear identification of the user—photograph or signature; and set criminal penalties for illegal use of credit cards.

The Fair Credit Reporting Act became effective in April 1971. This law protects the consumer's right to an accurate, up-to-date, and confidential credit report. It gives consumers the right to obtain information about their credit records and to ask for a reinvestigation if the completeness or accuracy of any item on the record is questionable. Information must be given free of charge if the consumer has been denied credit, insurance, or employment within the previous 30 days. Otherwise, the credit-reporting agency is permitted to charge a reasonable fee. The credit bureau must delete any information found to be inaccurate or no longer verifiable. If the reinvestigation does not settle the dispute, the consumer may file a brief statement presenting his or her position. The act also regulates the use of out-of-date information and access to credit records.

INTEREST RATES



MAY 1977. PERCENT PER YEAR. *NO DATA. SOURCE: FEDERAL RESERVE BOARD.

The Fair Credit Billing Act, effective in October 1975, set up a billing dispute settlement procedure for "open end" credit and imposed certain other requirements on the creditor to assure fair and prompt handling of credit accounts. This act requires creditors extending open-end credit (such as department stores and banks) to:

(1) Include with the monthly bill a statement informing the customers of thier rights in questioning the bill and giving the address to which all inquiries must be sent;

(2) Mail billing statements to the customer at least 14 days before the date that payments are due;

(3) Settle all billing disputes within 90 days;

(4) Refrain from making adverse statements to credit-reporting agencies and from turning accounts over to collection agencies when an account is in dispute; and

(5) Credit all payments, overpayments, and returned merchandise promptly to accounts.

The law also provides that a seller may no longer be restricted by bank-card issuers from offering discounts for cash and reverses the doctrine of "holder in due course" under which the third party holding the credit contract had no obligation for the merchandise received by the customer.

The Equal Credit Opportunity Act, effective in October 1975, prohibits creditors from discriminating on the basis of sex or marital status in any aspect of a credit transaction. Amendments in 1976 expanded the act's prohibition to include discrimination based on race, color, religion, national origin, age, and receipt of income from public assistance programs. Other aspects of the act and amendments provide that:

(1) A creditor must notify applicants of action taken on their credit applications and provide reasons for adverse action;

(2) A creditor may request and consider information about the spouse of the credit applicant *only* when the spouse will be using or will be liable for the account, or when the applicant is relying on the spouse's income or property; and

(3) After June 1, 1977, creditors that furnish credit information about married couples to consumer-reporting agencies or to other creditors will be required to report information in both spouses' names so that married women will develop credit histories in their own names.

The Consumer Leasing Act, effective March 1977, applies to the leasing of personal property (basically automobiles and furniture) for more than 4 months, and for which the total cost of the transaction is under $25,000. The act requires that the leasing company make an accurate and detailed disclosure of all terms and costs in advertisements and to the customer before the transaction.

Before 1968 and the passage of the Truth in Lending law, most consumer credit legislation was enacted by various States. The current relationship between State and Federal law is complicated by provisions that sometimes provide for State law to be preempted by a Federal law and sometimes exempt a State from Federal laws. In one area, however, States have complete jurisdiction—the setting of ceilings on the interest rates that may be charged for consumer credit.

By direction of Congress, both the Federal Trade Commission and the Federal Reserve Board (FRB) issue rules and regulations relating to consumer credit. FRB through Regulation Z writes regulations for implementing most of the Truth in Lending law. The Board also issues official interpretations of its regulations for use by creditors.

Currently, creditors issuing credit are operating under a system which includes State laws and regulations, Federal laws and regulations, FRB staff interpretations of laws and regulations, and State and Federal court discussions concerning consumer credit. The FRB has expressed concern about the degree of complexity and overlap of existing laws and has made suggestions to simplify and clarify the many laws pertaining to credit.

References

Board of Governors of the Federal Reserve System. 1977. Equal credit opportunity. *Federal Reserve Bulletin* 63 (2): 101-107.

——— 1977. Housing in the recovery. *Federal Reserve Bulletin* 63 (3): 189-199.

———, [n.d.] What Truth in Lending means to you. 5 pp.

Booth, S. L. (National Consumer Finance Association. [1977.] Finance facts yearbook 1977. 79 pp. Consumer Credit Education Foundation, Washington, D.C.

Family Economics Review. 1977. Consumer Leasing Act of 1976. Spring issue, p. 29.

Federal Trade Commission. [1976.] The Fair Credit Billing Act. 5 pp.

——— [n.d.] Equal Credit Opportunity Act. 5 pp.

——— [n.d.] Fair Credit Reporting Act. 6 pp.

Flannery, M. J. 1974. Credit unions as consumer lenders in the United States. *New England Economic Review.* July-Aug. issue, pp. 3-12.

Jackson, P. C. (Board of Governors of the Federal Reserve System). 1977. Talk before the Consumer Affairs Subcommittee, Feb. 7. 11 pp.

Public Law 91-508, 84 Stat. 1126 (Oct. 26, 1970). Title V—Provisions relating to credit cards: Sec. 502 (a), adds Sec. 132 to the Truth in Lending Act.

U.S. Department of Commerce, Domestic and International Business Administration. 1976. Consumer credit—Factors influencing its availability and cost. 37 pp.

U.S. Senate, Committee on Banking, Housing, and Urban Affairs. 1976. Consumers guide to banking. 36 pp.

Federal Reserve Board data published in Federal Reserve Bulletins and statistical releases.

CREDIT UNIONS

by Carolyn S. Edwards

Credit unions (CU's), the fastest growing financial institutions in the United States, are cooperative associations organized by persons who have in common their occupation, association, or residence. Owned and managed by the members themselves, CU's are service rather than profit or charity organizations. They are designed to meet member needs by promoting pooled savings, thereby creating a source of low-cost credit for members. It is this common bond orientation and the resulting unique method of operation that have enabled CU's to reach many consumers and to achieve a substantial growth record. CU's number over 22,000 (table 1) and serve nearly 35 million members. In 1976 membership in federally chartered CU's (Federal CU's) increased by 1 million for the fourth consecutive year (*8*).[1]

Consumer savings at CU's have increased faster than at other major financial institutions. In the 5 years from yearend 1971 to 1976, total savings in all CU's more than doubled; insured savings nearly tripled (table 1). Research conducted by the National Credit Union Administration (NCUA) indicates that this increase has probably not been at the expense of savings in other financial institutions but that CU's have tapped new markets, initiating savings habits in many who might not otherwise have saved (*13*).

CU's have achieved their greatest success in lending services and have become the fastest growing source of consumer installment credit. In the 6 years from yearend 1970 to 1976, CU-held installment debt increased 135 percent, compared with the increase of 75 percent for all lenders (table 2). CU credit growth in 1976 was more than twice that of the largest lenders and accounted for almost a third of the increase in total outstanding consumer installment credit. As a result, CU's increased their proportionate share of total installment credit to 17 percent, while other major lenders experienced a decline (*8*).

Legislation passed April 19, 1977, authorized Federal CU's to offer more flexible services, providing impetus to continued CU growth (*11*).

Authorization and Regulation

CU's originated in Europe in the mid-19th century when they were first designed to serve the needs of the working classes to combat usury. In 1934 the U.S. Congress enacted the Federal Credit Union Act. Although a number of States already had laws permitting CU's, the Federal action provided a uniform statute for regulation on a national basis.

CU's may be State or federally chartered. At yearend 1976, 56 percent of all CU's were federally chartered (table 1). The National Credit Union Administration (NCUA), an independent agency of the executive branch of the Federal Government, is the governing regulatory agency for the Federal CU system. Once potential CU's have met minimum standards, bylaws are developed and a charter granted. Supervision and examination for compliance with regulations, determination of solvency, and management assistance are carried out on a frequent basis. CU's may also be incorporated under one of 46 State laws. State-chartered CU's are regulated and examined by State agencies and may be authorized to provide services unavailable at Federal CU's. On the other hand, a CU may opt for a Federal charter because of restrictive State regulations.[2]

[1] Numbers in parentheses refer to References at the end of this article.

[2] Unless otherwise specified, material in this article is based on Federal CU operations. Appropriate State authorities should be contacted for information applicable to State CU's.

Table 1. Number of U.S. credit unions and total savings in U.S. credit unions, by type of charter and Federal insurance status, December 31, 1971, to December 31, 1976

Year (ending Dec. 31)	U.S. total	Federal charter, total [1]	State charter			Federally insured [3]	
			Total	Federally insured	Nonfederally insured [2]	Total	Percent of all United States
			Number of credit unions				
1971	23,253	12,717	10,536	793	9,743	13,510	58.1
1972	23,064	12,708	10,356	1,315	9,041	14,023	60.8
1973	22,877	12,688	10,189	1,656	8,533	14,344	62.7
1974	22,844	12,748	10,096	2,398	7,698	15,146	66.3
1975	22,603	12,737	9,866	3,040	6,826	15,777	69.8
1976	22,606	12,757	9,849	3,519	6,330	16,276	72.0
			Total savings in credit unions				
			Thousands of dollars				
1971	18,365,261	9,191,182	9,174,079	1,699,418	7,474,661	10,890,600	59.3
1972	21,629,023	10,956,007	10,673,016	2,886,568	7,786,448	13,842,575	64.0
1973	24,522,739	12,597,607	11,925,132	3,734,537	8,190,595	16,332,144	66.6
1974	27,513,797	14,370,744	13,143,053	5,191,566	7,951,487	19,562,310	71.1
1975	33,032,708	17,529,823	15,502,885	7,442,904	8,059,981	24,972,727	75.6
1976	39,115,603	21,130,293	17,985,310	9,223,415	8,761,895	30,353,708	77.6

[1] All federally insured.
[2] Some are State insured.
[3] Federal and State charter.

Source: National Credit Union Administration. 1976 Annual Report of NCUA, June 1977.

Table 2. Consumer installment credit outstanding, by type of lender, December 31, 1970, to December 31, 1976

Type of lender	Total outstanding Dec. 31			Distribution			Change from:			
	1970	1975	1976	1970	1975	1976	1970 to 1976		1975 to 1976	
	Millions			*Percent*			*Millions*	*Percent*	*Millions*	*Percent*
Total, all lenders	101,898	162,237	178,775	100.0	100.0	100.0	76,877	75.4	16,538	10.2
Financial institutions ..	88,216	144,235	159,597	86.6	88.9	89.3	71,381	80.9	15,362	10.7
Commercial banks	45,396	78,703	85,379	44.6	48.5	47.8	39,983	88.1	6,676	8.5
Finance companies	27,514	36,695	39,642	27.0	22.6	22.2	12,128	44.1	2,947	8.0
Credit unions	12,986	25,354	30,546	12.7	15.6	17.1	17,560	135.2	5,192	20.5
Others [1]	2,320	3,483	4,030	2.3	2.2	2.2	1,710	73.7	547	15.7
Retail outlets [2]	13,682	18,002	19,178	13.4	11.1	10.7	5,496	40.2	1,176	6.5

[1]Savings and loan associations, mutual savings banks, and auto dealers.
[2]Excludes 30-day charge credit held by retailers, oil and gas companies, and travel and entertainment companies.

Sources: Board of Governors of Federal Reserve System, Division of Research and Statistics. National Credit Union Administration, 1976 Annual Report of NCUA, June 1977.

Operations

State and federally chartered CU's operate in basically the same manner. Chartering is limited to groups sharing a particular common bond, such as source of employment, membership in religious, trade, or professional associations, or residential community groups. Of the total Federal CU's in 1976, about 80 percent were occupational, 15 percent associational, and the remainder residential (*8*). While this field of membership restriction has limited the access of consumers to CU's, broader definitions for eligibility in recent years have made CU membership available for more individuals.

In order to participate, a qualified individual must become a member by purchasing one share in the CU, generally $5. Members are shareholders and each may attend and vote at annual or special meetings. A board of directors elected from the membership appoints officers and governs the CU. A credit committee, comprised of members, approves loan applications and a supervisory committee, also made up of members, inspects the books and operating procedures. Officers and committee members are not compensated, except in larger CU's which may support the treasurer as a staff member.

Practices and policies, determined by individual CU's, are designed to meet the needs of members while adhering to the restrictions of the chartering regulations. Democratic control, participation by members, and volunteer effort are emphasized as the basis of CU operations. CU's arose out of the philosophy that cooperative service would provide economic independence for working people and best serve the needs of both borrowers and savers. It is this type of management that has led CU's to be referred to as "people's banks."

Member Services

Savings. Member's savings are made in the form of share purchases to be added to share accounts. Savings may be made in small amounts and may generally be withdrawn at will, although a 60-day notice may legally be required.

All federally chartered CU's—and State-chartered CU's that apply and qualify—offer U.S. backed share account insurance up to $40,000. This is provided by the National Credit Union Share Insurance Fund (NCUSIF), administered by the NCUA,[3] and protects member share accounts in the case of CU liquidation. Seventy-two percent of the total number of CU's (table 1), representing 78 percent of the savings (*8*) in all CU's in the United States were insured by NCUSIF as of December 31, 1976. As of the same date, Federal share insurance had been extended to about 35 percent of the number of State-chartered CU's, representing about 51 percent of the savings of all State-chartered CU's (*8*). If not insured by the NCUSIF, accounts in State-chartered CU's may be insured through State provisions. Only 15 percent of the accounts in State CU's were not insured by either the NCUSIF- or State-administered programs.

Protection in the case of death of the CU member is offered by some CU's. Under life savings insurance, each eligible dollar a member saves, up to a limit, is matched with a dollar of life insurance. A decreasing scale is applied to savings of members aged 55 and over.

As nonprofit cooperative organizations, CU's return earnings to members in the form of dividends on share holdings. Dividends are computed and announced at the end of each earning period after expenses are paid and reserves set up, thus reflecting the profit-and-loss experience of the CU during the period.

CU's are allowed to compute dividends as frequently as daily; this policy is up to the discretion of the individual CU, as is the determination of the existence and length of any grace period. When dividends are computed on any other than a daily basis, bookkeeping is generally done by the last in, first out method (*12*). In 1976 dividends were declared semiannually by 63 percent of Federal CU's and quarterly by 26 percent. Only 2 percent declared more often than quarterly. A small number—25—followed a policy of declaring daily (*8*).

Federally chartered CU's are restricted to paying dividends of no more than 7 percent per annum. In 1976, 11 percent of all Federal CU's paid this maximum rate of 7 percent; 44 percent paid from 6 to 7 percent; 31 percent paid

[3] This is similar to the insurance provided by the Federal Deposit Insurance Corporation (FDIC) and the Federal Savings and Loan Insurance Corporation (FSLIC) for commercial bank and savings and loan association accounts, respectively.

from 5 to 6 percent; and only about 8 percent of the Federal CU's paid at a rate less than 5 percent. Only 6 percent paid no dividends at all (*8*). Dividend rates of CU's compare quite favorably to counterpart passbook savings accounts available at other financial institutions, where interest ceilings on such accounts are stricter.

Payroll savings plans, offered primarily by occupationally related CU's, offer the ability to have a preauthorized sum automatically deducted from the paycheck and applied to savings through the purchase of additional shares. This is probably one of the features that has contributed to the increase in savings and membership of CU's.

Members of many Federal and State CU's may also have convenient access to savings. Share draft accounts enable members to write drafts, similar to checks, on savings in share accounts while still earning dividends.

Lending. Because of problems associated with consumer credit, traditional loans from financial institutions and other sources are generally costly and limited in supply. This is particularly true for personal, unsecured loans. Lenders must cover the cost of credit investigations, processing procedures, defaults, and collections. Because these costs do not vary with the size of loans, many lenders are reluctant to extend small consumer loans and must charge high rates to cover their costs. The limited availability of consumer loans has also added to time and effort necessary to obtain such loans, and in some cases, has opened the door for loan sharking (*2*).

It is with consumer lending, however, that CU's are particularly able to take advantage of their unique common-bond nature to meet credit needs of members. Membership in CU's generally provides relatively easy access to credit at reasonable rates and, often, almost immediate emergency loans.

Deposits of shareholders are used as capital to lend to borrowers. Membership in the sponsoring organization provides most necessary information on borrowers' potential creditworthiness and eliminates the need for costly credit investigations. Convenience of location and access to payroll deduction plans make loan processing easy for both borrower and lender, cutting costly handling procedures and delinquency or default risks. Allegiance to the common bond and inherent social pressures probably also increase repayment conscientiousness. Volunteer labor and operating facilities often donated by the sponsoring organization further reduce costs. Coupled with a tax-exempt status, these organizational features have allowed CU's to supply low-cost consumer credit in a market characterized by high costs for borrowers and lenders alike.

CU's offer consumer credit at rates substantially below those of any other major category of lender. Federal CU's are permitted to charge a maximum of 1 percent per month (12 percent APR) on the unpaid balance, inclusive of all charges. Most also provide credit protection life insurance at no additional charge. In 1976 about 75 percent of Federal CU loans were made at this rate. This is the maximum, however; CU's can and do charge even less. Loans typically have short maturities and are small—a $25 payday loan is not unusual. The average loan size of Federal CU loans in 1976 was about $1,700 (*8*).

Among a sample of relatively large Federal CU's, about 42 percent of the loans made in 1976 were unsecured, whereas about 58 percent were secured. Secured loans, however, accounted for about 76 percent of the total dollar amount of loans in 1976. Loans to purchase durable goods accounted for about 39 percent of loans made by the sampled Federal CU's—but these loans accounted for almost half of the total dollar amount loaned, reflecting the use of these loans for costly items such as automobiles, boats, mobile homes, and household equipment. Automobiles were of particular importance, accounting for 24 percent of the loans and 35 percent of the dollar amount loaned. Loans for personal and household expenses accounted for a greater proportion of CU loans (44 percent) than did durable goods, but for less of the total dollar amount—less than one-third. In the personal loan category, debt consolidation loans were most important, followed by vacation, education, and tax loans. Loans granted by smaller CU's, however, tend to be smaller, unsecured, and of shorter maturities, altering this profile (*8*).

CU's may pay interest refunds to their borrowers, reducing the net rate charged for loans. In 1976 about 15 percent of Federal CU's paid

refunds, most commonly at a rate between 10 and 11 percent (*8*).

CU's may also extend lines of credit to members. Preapproved loan applications allow members to obtain needed funds, at will, up to a predetermined credit maximum. Finance charges are not assessed until the credit is used. Funds may be obtained in person, by mail, or in some cases with drafts. When such line of credit services are tied to share draft accounts, members can write drafts in excess of their account balances. Repayment may also be handled personally or by payroll deductions.

Other member services. In addition to share accounts and loan programs, CU's may offer other services, including safe-deposit boxes, check-cashing services, and money order and travelers' check sales. Nearly all CU's also offer consumer financial counseling and many participate in group discount buying programs.

1977 Legislation

The first major expansion of the original Federal Credit Union Act of 1934 came on April 19, 1977 (*11*). This legislation has substantially liberalized the regulations under which Federal CU's operate and will allow a more comprehensive range of lending and saving services.[4]

While the new law directly affects the 12,757 Federal CU's (56 percent of all CU's), many State-chartered CU's operate under or may adopt similar rules and may therefore also be affected.

Lending services. New and expanded lending provisions authorized by the legislation have liberalized loan limits and maturities (*7*, *10*). The limit of $2,500 on unsecured loans has been removed, allowing each CU to set its own limits. Maturities of 5 years on unsecured loans and 10 years on secured loans have both become 12 years, and each CU can determine any need for collateral. Mobile home and home improvement loan maturities have been extended from 10 to 15 years. Even longer maturities are available with Government-insured or guaranteed loans.

CU's are now authorized to join other financial institutions as a source of 30-year residential mortgage loans (*5*). Prior to these recent changes, mortgage maturities were limited to 10 years, effectively eliminating CU's from a role in home finance. The mortgages will be limited to purchases of one-to-four family dwelling units that serve as the principal residence of the member. In addition, the sales price of the unit may not exceed 150 percent of the median price of residential properties in the area. These new mortgage provisions will probably affect only those few large CU's with assets substantial enough to be committed in the high amounts and long periods of time associated with mortgages.

Provisions for revolving credit services have eliminated the need for each individual loan to be acted upon by the CU credit committee (*10*). The extension of self-replenishing lines of credit will allow the member to borrow continuously as long as the total outstanding debt does not exceed the maximum amount granted. Prior to this provision, payments did not automatically restore the credit allowance. This new service should reduce costs, delays, and inconveniences for both members and CU's. It also opens the way for credit cards and CU participation in electronic funds transfer systems.

Operations. Among changes that affect CU operations are those that will provide opportunities for CU's to make more efficient use of funds and increase their liquidity position. CU's will be able to cooperate with each other to meet member loan needs, such as larger and longer term real estate, mobile home, and home improvement loans. This should be helpful to all CU's, particularly the small and new CU's. CU's currently have no central liquidity fund to serve as a secondary source of funds when money is tight. Local economic or emergency situations that could cause members to reduce savings or delay repayment of loans could force a curtailment in the extension of certain kinds or amounts of loans or create a lack of funds to meet immediate withdrawals at a time when they were needed most. The

[4] As this issue of *Family Economics Review* went to press some of the new lending and operational provisions had become effective with the April 19 passage (*7*), some went into effect under new implementing regulations on August 4 (*10*), and some awaited proposed regulations. Regulations to implement the savings provisions have been proposed and are open for public comment (*9*).

ability to borrow additional funds should help CU's in such situations.

Proposed savings programs. As a result of the new legislation the NCUA has proposed regulations for new savings programs offering varying maturities and dividend rates (*9*). If adopted, in addition to the traditional share accounts, Federal CU's may offer notice, split-rate, minimum balance, or share certificate accounts. The *notice* account would require a minimum of 90 days notice of intent to withdraw and could pay a higher dividend rate than the traditional share account. A *split-rate* account would offer different dividend rates on different portions of the balance. For example, the first $500 might earn one rate, the second a higher rate, and possibly an even higher rate on savings over $1,000. A *minimum balance* account would offer a special dividend rate on savings maintained at or above the minimum required for an entire earning period. A *share certificate* account, with a specific maturity and minimum balance requirement, would be comparable to certificates of deposit currently available at other financial institutions. Details of specific accounts would be at the option of the CU.

Prior to these proposals there were no provisions for different account classifications, fixed maturity accounts, varying dividend rates, or rates in excess of 7 percent. Such changes should allow CU's to attract and retain higher levels of savings.

The savings proposals would also allow for the advance disclosure of yields members might anticipate. While this would not authorize CU's to guarantee a specific dividend rate, information on expected rates would remove some uncertainty associated with CU savings. As proposed too, the provision of full information on the conditions of the account and the basis upon which dividends are calculated—the "Truth in Savings" disclosures—would aid consumers in making wise decisions.

Credit Unions and Other Financial Institutions

Other financial institutions such as banks and savings and loan associations have also begun to offer new services. For example, new savings accounts offer interest bearing deposits with negotiable orders of withdrawal (hence, the name N.O.W. accounts) that are similar to checks. These are now available only in New England States but have been proposed for adoption by all federally regulated institutions of deposit. Electronic funds transfer systems (EFTS), which allow immediate financial transactions without the need for cash, checks, or credit cards, are becoming available on a limited basis. Federal and State legislators are also considering legislation which would further increase competition among financial institutions for consumer long and short term savings. The prohibition against payment of interest on checking accounts is currently being reevaluated and could be abolished through congressional action. The Federal and State governments are also looking at possibilities of offering non-interest-bearing N.O.W. accounts, which would probably look much like checking accounts. Also under consideration is the removal of rate ceilings on passbook savings accounts.

Critics of the new services offered or proposed by CU's and other financial institutions suggest that the new trends will eliminate the distinctions between existing institutions and threaten the common bond foundation of CU's. Critics maintain that by moving into new areas CU's will be forced to give up their concern for member cooperation and service in the interests of professional management and efficiency. Trends among other financial institutions such as N.O.W. accounts and EFTS could reduce CU comparative advantages and challenge their reason for existence. EFTS could lessen lender costs and allow other institutions to operate more efficiently in the consumer loan market, lessening the need for the special services available from CU's.

While the increased similarities among financial institutions and the services offered should be recognized, consumers should also understand that each still has its basic underlying purposes and orientation, and that each can deal well with particular needs. Banks place primary emphasis on commercial banking, savings and loan associations on housing and homeownership, and credit unions on consumer lending and savings. Consumers need to understand the unique features and comparative advantages of the services of each in order to make optimal use of their resources.

References

(1) Board of Governors of the Federal Reserve System, Division of Research and Statistics. Tables of monthly consumer installment credit, total outstanding unadjusted figures, 1970-1976.

(2) Flannery M. J. 1974. Credit unions as consumer lenders in the United States. *New England Economic Review*, July/Aug., pp. 3-12.

(3) Moody, J. C., and Fite, G. C. 1971. *The Credit Union Movement—Origins and Development, 1850-1970.* Lincoln: University of Nebraska Press.

(4) National Credit Union Administration. Federal Credit Union Bylaws, NCUA No. 8001, August 1970 (with changes of 9/74, 6/75, and 10/75).

(5) ———. The Federal Credit Union Act, as amended to April 19, 1977, NCUA No. 8002, Apr. 1977.

(6) ———. 1977. President Carter endorses CU legislation. *NCUA Quarterly* 5 (1). (Inside cover.)

(7) ———. *National Credit Union Administration Rules and Regulations*, Mar. 1972, reprinted with changes May 1977.

(8) ———. 1977. *1976 Annual Report of the National Credit Union Administration.*

(9) ———. Proposed rulemaking: Share accounts and share certificate accounts. *Federal Register* 42 FR 138, 37002-37005, July 19, 1977.

(10) ———. Final rule—Lending in Federal credit unions. *Federal Register* 42 FR 150, 39369-39373, Aug. 4., 1977.

(11) Public Law 95-22, 91 Stat. 49 (April 19, 1977). Amendments to the Federal Credit Union Act (12 U.S.C. 1751, *et seq.*).

(12) Rudd, N. 1973. Factors to consider in selecting a savings account. *Family Economics Review*, Summer issue, pp. 17-19.

(13) Stuart, W.J., Jr. 1976. Changing consumer investment habits: Some implications for credit unions. *NCUA Quarterly* 5 (1): 10-11.

VARIABLE INTEREST RATES IN CONSUMER CREDIT

Effective on October 10, 1977, a new rule adopted by the Federal Reserve Board will require advance disclosure of any variable rate clause in a credit contract that may result in an increase in the cost of credit to the customer. The rule requires disclosure of the fact that the annual percentage rate is subject to increase; conditions under which an increase may occur; the manner in which an increase would be affected; and, in home mortgage transactions, information that shows the effect a rate increase would have on the number of payments or the amount of those payments. The rule does not apply to "open end" credit or to increases in annual percentage rates due to default, acceleration, late payment, or assumption or transfer of property.

Source: Board of Governors of the Federal Reserve System, Federal Reserve Press Release, April 12, 1977, 9 pp.

FLAMMABILITY STANDARDS FOR SLEEPWEAR—A COST BENEFIT ANALYSIS[1]

by Annette Polyzou and Rachel Dardis[2]

Public concern about injuries and deaths from burns associated with flammable fabrics led to the enactment of the Flammable Fabrics Act in 1953. The act prohibited the manufacture or sale of all highly flammable wearing apparel and fabrics. In 1967, the act was amended to authorize the Secretary of Health, Education, and Welfare and the Secretary of Commerce to conduct investigations into the causes of and economic losses resulting from burn injuries and deaths, and to develop appropriate and reasonable flammability standards. These investigations led to the promulgation of flammability standards for large carpets and rugs (1971); small carpets and rugs (1971); children's sleepwear, sizes 0-6X (1972); mattresses and mattress pads (1973); and children's sleepwear, sizes 7-14 (1975).

In 1973 responsibilities and functions under the Flammable Fabrics Act were transferred to the Consumer Product Safety Commission (CPSC) from the Department of Commerce, the Department of Health, Education, and Welfare, and the Federal Trade Commission. As this issue of FAMILY ECONOMICS REVIEW went to press, the CPSC was considering promulgation of an additional standard(s) for wearing apparel—either a new general standard for apparel items, excluding shoes; or standards for specific items of apparel such as women's nightgowns, women's robes, men's and women's pajamas, women's and children's dresses, men's and boys' shirts, and men's and boys' trousers.

Current and proposed flammability standards may be evaluated to determine whether such standards enhance public welfare. Several studies comparing the costs to consumers versus the benefits to consumers of flammability standards were conducted at the University of Maryland during the past several years. The two existing children's sleepwear standards (FF 3-71, sizes 0-6X, and FF 5-74, sizes 7-14) and a hypothetical adult sleepwear standard were evaluated by comparing the estimated dollar cost to the consumer from an increase in the initial price of sleepwear garments and a reduction in wear-life due to flame retardant (FR) treatment, with the estimated dollar benefits derived from a reduction in sleepwear burn injuries and deaths. The dollar estimates for costs and benefits were compared through ratios. A ratio of 1.00 indicates that the consumer would spend $1.00 on flame retardant sleepwear for $1.00's worth of protection from sleepwear burn injuries and deaths.

ESTIMATING THE COSTS AND BENEFITS OF FLAMMABILITY STANDARDS

The estimated dollar *costs* to consumers for FR treated sleepwear were assumed to include an increase in fabric price due to the FR treatment and a reduced wear-life in garments treated for flame retardancy. Dollar *benefits* to the consumer from a flammability standard were assumed to include direct benefits—a reduction in medical expenditures associated with injuries and deaths such as hospital fees for inpatients and outpatients, physicians' fees, nursing care, drugs, and medical supplies—and indirect benefits—a reduction in earnings lost due to injuries and deaths.

A brief description of the method used in deriving dollar estimates for potential costs and benefits and comparing them through ratios is given below. The method is applied to a hypothetical adult sleepwear standard for the year 1975. In estimating dollar costs of the standard, the assumption was made that the criteria for the standard would be similar to those required for the existing children's sleepwear standard, sizes 7-14 (FF 5-74).

Costs

Increase in fabric price. The Consumer Product Safety Commission estimated that, in

[1] Research completed at the University of Maryland with financial support from the Maryland Agricultural Experiment Station and the National Science Foundation. This research is reported in Dardis (*2*) and Polyzou (*6*). Numbers in parenthesis refer to References at the end of this article.

[2] Home economist, Consumer and Food Economics Institute, ARS, USDA, and Professor of Textiles and Consumer Economics, University of Maryland, respectively.

1973, FR-treated fabric cost 55.34 cents per square yard more than untreated fabric (*1*). The CPSC also estimated that 837 million square yards of fabric consumed in adult sleepwear would need to be treated to meet the requirements of the standard. The additional cost to consumers, in 1973, for FR-treated adult sleepwear, therefore, was $463 million (55.34¢ X 837 million square yards of fabric). When this estimate was updated to 1975 (using the Consumer Price Index) the additional cost to consumers for the FR treatment of adult sleepwear was $519 million.

Reduced wear-life. Consumers spent an estimated $1,611 million for non-FR adult sleepwear in 1975 (*5*). If an adult sleepwear standard had been in effect, and if consumers had purchased the same quantity of sleepwear, total retail sales would have been $2,130 million ($519 million plus $1,611 million). If 13 percent of FR-treated garments were replaced in that year due to reduced wear-life (an estimate by Battelle Columbus Laboratories (*8*)),[3] the estimated cost to consumers from reduced wear life of FR adult sleepwear would have been $277 million (0.13 X $2,130 million).

Total costs. Total costs of a flammability standard for adult sleepwear (increase in fabric price of $519 million plus reduced wear-life of garments of $277 million) were $796 million.

Benefits

Direct benefits. Medical expenditures for burn injuries included hospital fees for inpatients and outpatients, physicians' fees, and other expenses such as nursing care, drugs, and medical supplies. There were an estimated 5,892 inpatients and 3,084 outpatients given hospital treatment for sleepwear burn injuries and an estimated 263 to 437 sleepwear burn deaths in 1975.[4] Hospital fees for inpatients were calculated by multiplying the number of sleepwear burn injuries by the average length of hospitalization and hospital cost per day (an estimated $292 per day). Hospital fees for outpatients were calculated by multiplying the number of outpatients treated for minor burns by the average hospital cost of treatment (an estimated $28 per treatment). Hospital fees for sleepwear burn deaths were calculated by multiplying the number of sleepwear burn deaths by the average length of hospitalization and hospital cost per day. Total hospital fees ranged from $63.60 million to $63.68 million, based on low and high estimates of the number of sleepwear burn deaths.

Data from the Department of Health, Education, and Welfare indicated that hospital fees account for 58.8 percent of total medical expenditures (*7, 10*). Physicians' fees and other expenses account for the remainder (41.2 percent) and amounted to between $44.56 million and $44.62 million for burn victims in 1975. The total expenses for hospital fees, physicians' fees, and other expenses ranged from $108.16 million to $108.30 million in 1975.

Indirect benefits. Indirect benefits from a reduction in sleepwear burn injuries were based on earnings lost to injured labor force or household workers. Total earnings lost were determined from the number of labor force or household workers, the number of days lost from work, and average labor force or housekeeping earnings. Labor-force earnings were based on annual mean income of year-round, full-time civilians in the labor force. Household production activities were valued according to the price charged in the marketplace for activities such as child care and meal preparation. The indirect benefits from a reduction in sleepwear burn injuries were $8.82 million.

Earnings lost due to deaths were based on low and high estimates of the number of burn deaths and expected lifetime earnings of burn victims. The calculation of expected lifetime earnings of individuals was based on the life expectancy of the individual, varying rates of employment and participation in the labor force, and annual mean earnings of labor force or household workers. Since earnings lost are measured by the present value of future earnings, a discount rate of 5 percent was used to place future earnings in the 1975 time period. Indirect benefits from a reduction in sleepwear

[3] The report (*8*) indicated that 40 percent of FR garments would require a 33-percent increase in purchases during the year, indicating that 13 percent (0.33 X 0.40) of FR garments would have to be replaced due to reduced wear-life.

[4] Low and high estimates of the number of sleepwear burn deaths are from data from the National Fire Protection Association (*3, 4*) and the National Bureau of Standards (*9*).

burn deaths ranged from $20.38 to $31.21 million based on low and high estimates of the number of sleepwear burn deaths.

Total benefits. Total benefits from a reduction in adult sleepwear burn injuries and deaths ranged from $137.36 to $148.33 million based on low and high estimates of sleepwear burn deaths. Direct benefits (medical expenditures) comprised a greater proportion of total benefits than indirect benefits (earnings lost). This reflects the high hospital costs per day and the extended length of hospitalization of a patient for treatment of a burn injury.

COMPARING COSTS AND BENEFITS

Costs and benefits of the hypothetical adult sleepwear standards were compared by dividing the estimated dollar costs of applying the standard by the low and high dollar estimates of benefits. The results were expressed in the form of ratios, a ratio of 1.00 indicating that the consumer would spend $1.00 on flame-retardant sleepwear for $1.00's worth of protection from sleepwear burn injuries and deaths.

Estimates of the costs and benefits of the hypothetical adult sleepwear standard (in 1975 prices) indicate that $1.00's worth of protection from sleepwear burn injuries and deaths would entail expenditures by the consumer of $5.37 to $5.80 (see table). The cost to consumers for the protection afforded by FR sleepwear would considerably outweigh the potential benefits and would not be cost effective.

When the same procedure was applied to the two existing children's sleepwear standards (*2*), $1.00's worth of protection required less than a $1.00 expenditure ($0.70 to $0.84) for the children's sleepwear standard sizes 0-6X, and $1.00's worth of protection required an expenditure of $1.15 to $1.36 for the children's sleepwear standard sizes 7-14. Both children's sleepwear standards are cost effective since consumers would spend approximately $1.00 for children's FR sleepwear for $1.00's worth of protection from sleepwear burn injuries and deaths.

LIMITATIONS

There are several limitations in the foregoing analysis. The cost to consumers of a sleepwear standard was underestimated since a reduction in consumer choice—possible if most cotton and cotton blends were eliminated from the market due to failure to meet the requirements of the standard—was not measured. Also not measured were indirect costs of a standard—such as a mutagenic or carcinogenic hazard to the health of individuals from FR compounds, and environmental hazards from disposal of large quantities of FR chemicals into water and soil. Benefits were also underestimated since no

Dollar costs and benefits of flammability standards for sleepwear in 1975

Standard	Total costs	Total benefits		Ratio
		Low	High	
	Million dollars			*Range*
Adult sleepwear	[1] 796.00	137.36	148.33	5.37 to 5.80
Children's sleepwear, sizes 0-6X	49.85	59.60	71.17	0.70 to 0.84
Children's sleepwear, sizes 7-14	64.80	47.50	56.43	1.15 to 1.36

[1]Assumes criteria similar to the FF 5-74 children's sleepwear standard, sizes 7-14.

provision was made for a reduction of pain and suffering.

The need for consumer protection in the area of flammable fabrics is evident. In some instances flammability standards may be appropriate. In other instances consumer education may be more effective. Other possible consumer protection strategies include self-extinguishing matches and cigarettes and modifications in the design of ranges, space heaters, and other equipment.

References

(1) Clones, J. 1975. Potential economic impacts from expansion of FR requirements to six specific apparel areas. U.S. Consumer Products Safety Commission, Bureau of Economic analysis, 16 pp.

(2) Dardis, R., et al. 1977. Cost-benefit analysis of consumer product safety programs. Final Report (NSF-RANN GRANT APR-75-09984).

(3) *Fire Journal.* 1969. The single-fatality fire: An NFPA Fire Department Study, pp. 34-35. (Study by the National Fire Protection Association.)

(4) Guillerat, E. E., Jr. 1967. Survey of fatal clothing fires. *Bulletin of the New York Academy of Medicine* 43 (8): 646-648.

(5) National Cotton Council of America. 1975. $3 billion cost increase to consumers. *Textile Industries*, pp. 57-61.

(6) Polyzou, A. 1977. Cost-benefit analysis of the FF 5-74 and PFF 7-74 standards as applied to adult sleepwear. Masters thesis, University of Maryland, College Park.

(7) Rice, D. P. 1966. Estimating the cost of illness. *Health Economics Series No. 6*, 131 pp. U.S. Department of Health, Education, and Welfare, Public Health Service.

(8) Simon, S. R., Hillman, M. E. D., Beck, P. R., Kaplan, C., Shetty, V., and Lindholm, J. H. 1975. Study of the feasibility of applying flammability standards to adult nightwear and other apparel. Research Report, v. 1, 56 pp., Battelle Columbus Laboratories.

(9) U.S. Department of Commerce, National Bureau of Standards. Personal communication with Benjamin Buckkinder and Susan Helzer, Office of Flammable Fabrics, Information and Data Unit, on unpublished burn data, Feb. 1976.

(10) U.S. Department of Health, Education, and Welfare, Social Security Administration. 1976. National health expenditures, fiscal year 1975. *Social Security Bulletin* 39 (2): 3-20.

AGRICULTURE HANDBOOK NO. 8, REVISED

The first two sections of the revised edition of Agriculture Handbook No. 8, "Composition of Foods...Raw, Processed, Prepared," have been published: 8-1, Dairy and Egg Products, and 8-2, Spices and Herbs.

The handbook is being revised in separate sections by food groups. To facilitate updating, the revision is prepared in looseleaf form. Each page contains the nutrient profile for a single food item. Data are presented on a 100-gram basis, in two common measures, and in the edible portion of 1 pound as purchased. Values are provided for refuse, energy, proximate composition (water, protein, lipid, carbohydrate, and ash), seven mineral elements (calcium, iron, magnesium, phosphorus, potassium, sodium, and zinc), nine vitamins (ascorbic acid, thiamin, riboflavin, niacin, pantothenic acid, vitamin B^6, folacin, vitamin B^{12}, and vitamin A), individual fatty acids, total saturated, monounsaturated, and polyunsaturated fatty acids, cholesterol, total phytosterols, and 18 amino acids.

The handbook may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Section 8-1 is $3.00, stock number 001-000-03635-1, and section 8-2 is $1.30, stock number 001-000-03646-7.

HOME AND GARDEN BULLETIN NO. 72, REVISED

A newly revised table of the nutritive values for household measures of commonly used foods is now available: "Nutritive Value of Foods," Home and Garden Bulletin No. 72, revised 1977. First published in 1960, the bulletin was revised in 1964, 1970, and 1971. For this most recent revision, nearly 200 new food items were added and some foods no longer in general use were deleted. Values for phosphorus and potassium are included for the first time. Measures and values for all foods were reviewed and updated; new information is provided for dairy products and the fatty acid content of foods; nutrient levels of enriched rolls, enriched flours, and products prepared from enriched flour reflect current enrichment standards.

The bulletin is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for $1.05, stock number 001-000-03667-0.

UNEMPLOYED PERSONS WITH WORKING RELATIVES—A NEW DATA SERIES

The growth in the number of multiworker families in the United States has increased the likelihood that an unemployed person lives in a family with a working relative. In the second quarter of 1977, 5.9 million of the unemployed were family members and about 71 percent of these persons had at least one other relative in the family who was employed (see table).

The degree of this "cushioning effect" on unemployment, however, varied a great deal by family type, as well as by who in the family was unemployed. Only 18 percent of the unemployed women who were family heads had someone else who was employed in their families, compared with 48 percent of the unemployed husbands. Much of the difference in these proportions is due to the fact that a majority of families headed by unemployed women have no one else of working age in the family, whereas only a small percent of families with unemployed husbands are without someone else of working age.

Unemployed black workers are less likely than unemployed white workers to live in a family which includes an employed relative. This is especially true for women who head families—about 27 percent of unemployed white women who headed a family had at least one employed person in the family compared with 4 percent of unemployed black women. By contrast, in husband-wife families there is less difference by race in the proportions of the unemployed with employed relatives.

The employment status of one family member is not totally independent of that of other family members. For example, the proportion of employed husbands who live in a family in which someone else is employed is greater than the proportion of unemployed husbands who live in a family that includes an employed person. This is because many characteristics, such as relative education and skill levels, tend to be similar for all members of an individual family. Moreover, all members of families living in areas of high unemployment will tend to experience greater than average difficulty in obtaining a job.

These data are from a new data series being published quarterly by the Bureau of Labor Statistics. The data will appear in the January, April, July, and October issues of EMPLOYMENT AND EARNINGS, as well as in regular press releases of the Bureau of Labor Statistics, U.S. Department of Labor. The new data can be used to examine employment patterns within the family, such as the number and percent of families in which there is either no employment, some unemployment, or no one in the work force.

Sources: Hayghe, H., 1976, New data series on families shows most jobless have working relatives, *Monthly Labor Review* 99 (12): 46-48; Klein, D. P., 1977, Labor force data by person-family relationship, *Employment and Earnings* 24 (7): 7-9.

Unemployed persons by family relationship and presence of employed family members, 2d quarter, 1977

Family relationship	Total	Percent of unemployed		
		With no employed person in family	With at least 1 employed person in family	With at least 1 person in family employed full time
	Thousands			
TOTAL				
Unemployed, total	6,724	38.1	61.9	55.7
Unemployed, in families [1]	5,852	28.9	71.1	63.9
Husbands [2]	1,386	51.7	48.3	38.4
Wives	1,299	14.0	86.0	80.6
Relatives in husband-wife families	2,051	11.0	89.0	85.1
Women who head families	376	81.6	18.4	10.9
Relatives of female heads	740	35.1	64.9	50.8
Unemployed, not in families [3]	872	--	--	--
WHITE				
Unemployed, total	5,298	36.7	63.3	57.2
Unemployed, in families [1]	4,583	26.9	73.1	66.2
Husbands [2]	1,174	52.6	47.4	37.5
Wives	1,079	12.9	87.1	82.6
Relatives in husband-wife families	1,672	10.1	89.9	86.1
Women who head families	228	72.8	27.2	15.4
Relatives of female heads	430	32.3	67.7	53.0
Unemployed, not in families [3]	715	--	--	--
BLACK [4]				
Unemployed, total	1,283	43.1	56.9	49.5
Unemployed, in families [1]	1,146	36.3	63.7	55.4
Husbands [2]	173	45.7	54.3	42.8
Wives	195	16.9	83.1	73.3
Relatives in husband-wife families	338	15.4	84.6	80.2
Women who head families	141	95.7	4.3	4.3
Relatives of female heads	299	39.1	60.9	47.2
Unemployed, not in families [3]	137	--	--	--

[1] In primary families only.
[2] Includes a small number of single, separated, widowed, or divorced men who head families.
[3] Includes unrelated individuals and persons in secondary families.
[4] According to the 1970 census, black workers comprised about 89 percent of the "black and other" population group.

Source: Klein, D.P., 1977, Labor force data by person-family relationship, Employment and Earnings 24 (7): 7-9.

MULTIPLE JOBHOLDERS, MAY 1976[1]

An estimated 3.9 million workers, 4.5 percent of all employed persons, held two jobs or more simultaneously in May 1976. This was the third consecutive year in which the multiple-jobholding rate was significantly below the 5-percent rate which prevailed during the 1960's and early 1970's. This decline reflects primarily a lower multiple-jobholding rate among men, who were more than twice as likely as women to hold two jobs in 1976 (5.8 and 2.6 percent, respectively). Two demographic factors contributed to the decline for men: Married men have higher multiple-jobholding rates than other men, and the proportion of employed men who were married decreased from 78 percent in 1970 to 73 percent in 1976; men with large families tend to moonlight more than others, and average family size has been declining.

The increase in the proportion of the work force who are women has been only a minor factor in the lower overall jobholding rate in the last few years. The increase in the proportion of wives who work has not been related to the decline in their husbands' multiple jobholding. Between 1971 and 1976 the multiple-jobholding rate of men whose wives were in the labor force has been higher than that of husbands whose wives were not in the work force. Also, multiple jobholding is apparently unrelated to any wide swing in the economy. For instance, as the Nation's unemployment rate rose from 4.6 percent in May 1974 to 8.3 percent in May 1975 and then receded to 6.7 in May 1976, neither the number of multiple jobholders nor the rate of multiple jobholding changed significantly.

As in previous years, multiple jobholding in May 1976 varied by marital status, race, and primary job. The multiple-jobholding rate of married men was higher than that of other men; however, married women were less likely to moonlight than single, widowed, divorced, or separated women. Among both men and women, relatively more whites than blacks held second jobs. Men employed as teachers below the college level on their primary jobs had the highest moonlighting rate for men (18 percent), and women teachers and farm laborers had the highest rates for women (5 percent).

Over half of the moonlighters held two nonagricultural wage or salary jobs, while about one-fourth combined wage or salary work and self-employment in nonagricultural industries. Over 800,000 multiple jobholders, one-fifth of the total, had at least one job in agriculture. Most of this latter group were nonagricultural wage and salary workers who operated their own farms as a secondary job.

Men worked more hours at secondary jobs than women, a median of 14 hours per week compared with 11 hours. Men in the prime working ages of 25 to 54 worked the longest hours—nearly one-fourth of them spent 22 hours or more per week moonlighting. Persons who moonlighted as farmers worked the most hours, an average of 17 per week—about 30 percent worked 22 hours or more on their farms. Nearly one-fourth of those holding a second job in transportation, communication, public utilities, and in business and repair services worked 22 hours or more.

Thirty percent of multiple jobholders held second jobs to meet regular expenses. Twenty percent enjoyed the work on their second jobs, and 5 percent moonlighted to pay debts. Economic reasons were more important for black dual jobholders than for white. Nearly half of the black multiple jobholders were working at two jobs to meet regular expenses, and 10 percent moonlighted to pay debts. Almost the same proportion of married women moonlighted because they enjoyed the work as did to meet regular expenses. However, married men were more likely to moonlight to meet regular expenses.

[1] Multiple jobholders are employed persons who, during the survey week (1) held jobs as wage or salary workers with two or more employers, (2) were self-employed and also held a wage or salary job, or (3) were unpaid family workers and also held a secondary wage or salary job. Also included are persons who had two jobs during the survey week because they were changing from one job to another (about 1 percent of all multiple jobholders).

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1977, Multiple jobholders, May 1976, *Special Labor Force Report 194.*

DIVORCED WOMEN IN THE LABOR FORCE

Divorced women have the highest labor force participation rate of any marital group of American women. Of the 4 million divorced women in the United States in March 1975, 72 percent were in the labor force. This compares with 57 percent of never-married women, 55 percent of separated women, 44 percent of married women living with their husbands, and 24 percent of widowed women.[1]

The United States had the highest divorce rate in the world in 1975 (4.8 per thousand population), when more than 1 million divorces were recorded, and preliminary vital statistics for 1976 indicated that the divorce rate is continuing to rise. In March 1975, divorced women accounted for 5.0 percent of the female population, up from 3.7 percent in 1970. During this same period divorced women made up 6.2 percent of the female labor force in 1970 and 7.9 percent in 1975. Almost all of this rise was due to the increase in the number of divorced women in the population rather than to a change in their labor force rates. During the substantial influx of all women into the labor force between 1970 and 1975, the labor force participation rates of both divorced and separated women remained relatively constant.

A greater proportion of divorced women with children under 18 (75 percent) than of those without children (70 percent) were in the labor force. Those without children were older, on average, and thus less likely to work. Divorced mothers whose youngest child was of school age (6 to 17 years) had the highest labor force participation rate; 80 percent of these women were in the work force compared with 66 percent of the divorcees with preschoolers. In March 1975, 85 percent of employed divorced women worked full time, and neither the presence nor age of children had any significant effect on this rate. Divorced women had about the same unemployment rate as married women (8 percent in 1975), while separated women had an unemployment rate almost twice as high (15 percent). Separated women are younger, on average, than divorced women and are more likely to have younger children. In March 1975, more than 50 percent of all divorced and separated women of working age headed their own families, with separated women more likely to head families with children.

The median income for divorced women in 1974 ($5,600) was about $2,000 above that for separated women. This reflects the higher labor force participation rate of divorced women and the larger proportion working year-round, full time. The highest levels of income of divorced women were among those who were primary family heads or individuals living alone.

[1] Includes women 16 years and over. The labor force participation rate of never-married women rises to 67 percent for women 20 years and over and to 65 percent for women 25 years and over.

Sources: U.S. Department of Labor, Bureau of Labor Statistics: 1971, Marital and family charactertistics of workers, March 1970, *Special Labor Force Report 130*; 1975, Marital and family characteristics of the labor force, March 1975, *Special Labor Force Report 183, 1977*; 1977, The labor force patterns of divorced and separated women, *Special Labor Force Report 198*. These reports were reprinted from the *Monthly Labor Reviews*, Mar. 1971, Nov. 1975, and Jan. 1977, respectively.

CONSUMER EXPENDITURE SURVEY 1972-73

In 1972-73, expenditures for transportation accounted for more than 20 percent of spending for current consumption (up from 15 percent in 1960-61) and edged past food to become the second largest expenditure category of U.S. families. Most of the rise in the transportation category was due to expenditures for automobile purchases, finance charges, maintenance costs, and gasoline. Food which accounted for almost 25 percent of expenditures in 1960-61 accounted for just 20 percent in 1972-73. This drop was attributable to a decrease in the share of expenditures going for food at home (from 20 to 14 percent); the share for food away from home increased from 5 to 6 percent.

Housing maintained its ranking of first, increasing its share from 28 to 31 percent. (Expenditures for housing *exclude* payments on mortgage principal, which are considered a reduction in liabilities, but include the amount paid to mortgage interest.) Despite rapidly rising health care costs, the percentage of consumer expenditures attributable to health care declined. In 1972-73 more families were likely to have their health insurance premiums paid for by their employers or by the government than in 1960-61, thus reducing families' out-of-pocket expenses.

These data are from the preliminary results of the 1972-73 Consumer Expenditure Survey, published in 1977 by the Bureau of Labor Statistics (BLS). Data for the two survey years 1972 and 1973 were combined by BLS to make possible a comparison with published expenditure data from the earlier survey. The percentages are shares of total expenditures for consumption, *not* of family income. In addition to spending for current consumption, most families made outlays for personal insurance and pensions, gifts and contributions, and taxes. Data from the survey represent the pattern of spending of families in the early 1970's. Since the survey was conducted, prices for many goods have risen sharply, possibly changing the relative importance of various items in the budget.

In addition to the combined data for the 2 years, BLS has also published preliminary tabulations for each of the two survey years. These data, available in BLS's Report 455-3, are from the interview portion of the survey and do not include expenditures such as housekeeping supplies and nonprescription drugs that were collected in the diary portion of the survey. BLS has also announced the availability of public use computer tapes for the interview portion of the survey. For information on obtaining these tapes or published data, write to Division of Living Conditions Studies, Office of Price and Living Conditions, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

Sources: U.S. Department of Labor, Bureau of Labor Statistics: 1976, Average annual expenditures for commodity and service groups classified by nine family characteristics, 1972 and 1973, *Consumer Expenditure Survey Series: Interview Survey, 1972 and 1973*, Report 455-3, 93 pp., plus errata sheet; 1977, Changes in consumer spending, *News*, Release 77-428.

SOME NEW USDA PUBLICATIONS

(Please give your ZIP code in your return address when you order these.)

The following are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402:

- COOKING FOR TWO. PA 1043. Revised June 1977. $1.90.
- A GUIDE FOR PRECOSTING FOOD FOR SCHOOL FOOD SERVICE. PA 1185. June 1977. $1.60.

Single copies of the following are available free from the U.S. Department of Agriculture. Please address your request to the office indicated.

From Office of Communication, Washington, D.C. 20250:

- A GUIDE TO BUDGETING FOR THE YOUNG COUPLE. G 98. Revised July 1977.
- HOW TO BUY MEAT FOR YOUR FREEZER. G 166. Revised October 1976.
- GROWING TOMATOES IN THE HOME GARDEN. G 180. Revised June 1977.
- YOUR MONEY'S WORTH IN FOODS. G 183. Revised June 1977.
- BE SAFE FROM INSECTS IN RECREATION AREAS. G 200. Revised May 1977.

From Food and Nutrition Service, Information Division, Washington, D.C. 20250:

- FOOD PROGRAMS OF THE U.S. DEPARTMENT OF AGRICULTURE. PA 1161. March 1977.

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Cost of food at home estimated for food plans at 4 cost levels, September 1977, U.S. average[1]

	Cost for 1 week				Cost for 1 month			
	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars				*Dollars*			
FAMILIES								
Family of 2:[3]								
20-54 years	23.60	31.30	39.30	47.20	102.00	135.60	170.20	204.40
55 years and over	21.20	27.90	34.60	41.40	91.70	121.20	149.80	179.40
Family of 4:								
Couple, 20-54 years and children--								
1-2 and 3-5 years	33.20	43.50	54.20	65.20	143.40	188.40	235.30	282.50
6-8 and 9-11 years	40.00	52.40	65.70	79.00	172.50	226.90	284.90	342.20
INDIVIDUALS[4]								
Child:								
7 months to 1 year	4.70	5.80	7.10	8.40	20.40	25.20	30.80	36.40
1-2 years	5.30	6.80	8.40	10.10	22.90	29.70	36.60	43.60
3-5 years	6.40	8.20	10.10	12.20	27.80	35.40	44.00	53.10
6-8 years	8.20	10.60	13.30	16.00	35.40	46.10	57.80	69.50
9-11 years	10.30	13.30	16.70	20.10	44.40	57.50	72.40	86.90
Male:								
12-14 years	10.90	14.10	17.70	21.30	47.40	61.20	76.80	92.20
15-19 years	12.00	15.60	19.60	23.60	52.20	67.70	84.90	102.40
20-54 years	11.80	15.60	19.70	23.80	50.90	67.60	85.50	103.20
55 years and over	10.50	13.80	17.20	20.70	45.40	59.90	74.40	89.70
Female:								
12-19 years	9.80	12.70	15.70	18.80	42.40	54.90	68.10	81.50
20-54 years	9.70	12.90	16.00	19.10	41.80	55.70	69.20	82.60
55 years and over	8.80	11.60	14.30	16.90	38.00	50.30	61.80	73.40
Pregnant	12.30	15.90	19.50	23.20	53.20	68.90	84.70	100.70
Nursing	13.00	16.80	21.00	24.90	56.10	72.80	90.80	107.90

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1976 (thrifty plan) and Winter 1975 (low-cost, moderate-cost, and liberal plans) issues of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households from USDA's Household Food Consumption Survey with food costs at 4 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" released monthly by the Bureau of Labor Statistics.

[2]Coupon allotment in the Food Stamp Program based on this food plan.

[3]10 percent added for family size adjustment. See footnote 4.

[4]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--subtract 5 percent; 7-or-more-person--subtract 10 percent.

CONSUMER PRICES

Consumer price index for urban wage earners and clerical workers

(1967 = 100)

Group	Sept. 1977	Aug. 1977	July 1977	Sept. 1976
All items	184.0	183.3	182.6	172.6
Food	194.5	195.2	194.6	181.6
Food at home	192.2	193.2	192.8	179.9
Food away from home	203.7	203.0	201.7	188.7
Housing	192.7	191.4	190.5	179.5
Shelter	194.7	193.2	192.2	181.5
Rent	155.3	154.4	153.6	146.2
Homeownership	209.1	207.4	206.2	194.4
Fuel and utilities	205.5	204.5	203.5	185.1
Fuel oil and coal	285.1	284.1	283.7	250.8
Gas and electricity	218.0	217.4	216.0	192.2
Household furnishings and operation	178.9	178.1	177.4	170.2
Apparel and upkeep	156.2	154.8	153.4	150.2
Men's and boys'	155.8	154.3	152.6	150.1
Women's and girls'	148.6	147.0	145.6	145.0
Footwear	158.1	157.3	155.9	152.3
Transportation	178.5	178.9	179.3	169.5
Private	177.9	178.3	178.8	168.6
Public	184.1	183.5	183.5	176.9
Health and recreation	176.1	174.7	174.1	165.3
Medical care	206.3	204.9	203.5	187.9
Personal care	172.8	172.1	171.3	162.8
Reading and recreation	159.8	158.1	157.7	152.8
Other goods and services	160.6	159.1	159.1	153.9

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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FAMILY ECONOMICS REVIEW

HIGHLIGHTS/WINTER 1977

ANNUAL OUTLOOK ISSUE

THE OUTLOOK FOR CLOTHING
FOOD
HOUSING
ENERGY

ENERGY AND FARM-OPERATOR HOUSEHOLDS
TRANSPORTATION AND FARM-OPERATOR HOUSEHOLDS

ARS-NE-36
Consumer and Food Economics Institute
Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

FAMILY ECONOMICS REVIEW is a quarterly report on research of the Consumer and Food Economics Institute and on information from other sources relating to economic aspects of family living. It is prepared primarily for home economics agents and home economics specialists of the Cooperative Extension Service.

Authors are on the staff of the Consumer and Food Economics Institute unless otherwise noted.

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CLOTHING AND TEXTILES: SUPPLIES, PRICES, AND OUTLOOK FOR 1977[1]

by Annette Polyzou

Clothing expenditures and prices. Consumer expenditures for clothing and shoes averaged $345 per person during the first three quarters of 1976, according to preliminary figures (table 1). These expenditures represented a 5.2-percent increase in per capita expenditures over 1975. Approximately half this increase was caused by a rise in the level of prices, and about half resulted from increased buying—a real increase of 2.8 percent in dollars of constant value.

The price level for apparel and upkeep, as measured by the Consumer Price Index (CPI), averaged 3.5 percent higher during the first three quarters of 1976 than during the same period in 1975 (table 2). Increases among the three apparel subgroups averaged 3.3 percent for men's and boys' clothing, 2.6 percent for women's and girls' clothing, and 3.5 percent for footwear. Such increases for apparel items were less than the 6.0-percent increase for all items of the CPI.

The economy enjoyed a substantial growth during the first quarter of 1976. Real gross national product (GNP), the total output of goods and services adjusted for inflation, grew 9.2 percent on an annual basis during this period. This growth was largely due to a sharp increase in consumer expenditures. Consumers' "real" purchasing power increased substantially during this period due to strong gains in personal income and a relatively small increase in the price level. According to trade sources, retail sales increased greatly during the first quarter, with emphasis on durable goods and spring apparel. Retailers responded to this large increase in sales by rapidly building up inventories.

Economic growth slowed considerably during the second quarter. Real GNP expanded 4.5 percent on an annual basis during this period, less than half the 9.2-percent growth of the first quarter. The CPI rose at an annual rate of 6.4 percent, which is more than double the 2.9-percent annual rate of the first quarter. Various trade reports cited the following reasons for the sluggishness of retail sales during the second quarter:

- An increase in the price level.
- Lower income tax refunds in 1976 than in 1975.
- A slowdown in the rate of purchasing by consumers to compensate for their fast-paced buying during the first quarter.
- Unseasonably cool weather in many parts of the country, which discouraged purchases of such hot-weather merchandise as summer apparel.

The second quarter revealed a shift by consumers from strong buying of apparel to durable goods, according to trade sources. The big losers during this period included many lines of men's and women's nonsportswear apparel and children's wear. Retailers scheduled early clearance sales and took deep markdowns on regular stock to work down the large inventories accumulated during the first quarter.

Preliminary third-quarter figures indicated that real GNP expanded at 4.0 percent on an annual basis. Retail sales remained a bit sluggish during most of the third quarter although there was a fairly high volume of consumer purchases of fall apparel, especially sweaters, three-piece tailored suits, and coordinated sportswear for men and women. Trade reports indicated that retailers still felt the reluctance of consumers to purchase apparel and other nondurables during this period. They attributed this reluctance to lack of strong fashion

[1] Information in this paper is based on reports available during the period January through October 1976. Discussion of business trends is based on trade reports or news items in the *Daily News Record*, the *Wall Street Journal*, *Business Week*, the *New York Times*, and the *Washington Post*. Other sources include the following: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* 56(1), Part II, and 56(8), 1976. U.S. Department of Labor, Bureau of Labor Statistics, *News* (Consumer Price Index monthly reports). U.S. Department of Agriculture, Economic Research Service, *Cotton and Wool Situation*, CWS-4 and CWS-7 (1976). *Textile Organon* XLVII(9), September 1976.

Table 1. Annual expenditures on clothing and shoes [1]

Years [2]	Per capita expenditures		Percent of expenditures for personal consumption		Aggregate expenditures	
	Constant dollars (1972)	Current dollars	Constant dollars (1972)	Current dollars	Billions of constant dollars (1972)	Billions of current dollars
1947-63	203	142	8.6	9.1	33.6	23.5
1964-65	225	169	8.0	7.9	43.4	32.7
1966-71	242	214	7.6	7.7	48.8	43.1
1972	264	264	7.5	7.5	55.1	55.1
1973	281	291	7.7	7.6	59.2	61.3
1974	278	307	7.8	7.3	58.9	65.1
1975	287	328	8.0	7.2	61.3	70.0
1976 [3]	295	345	7.8	7.0	63.3	74.2

[1]Revised estimates for all years resulted from changes in definitions of personal consumption expenditures (other than clothing and shoes) and from statistical revision of previous estimates. More detailed information can be obtained from the U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, 56(1), Part I, 1976.

[2]Earlier years are grouped on basis of similarity in level of per capita expenditures in 1972 dollars.

[3]Preliminary figures--average of estimates for first 3 quarters of 1976 (i.e., seasonally adjusted quarterly totals at annual rates).

Source: Department of Commerce, revised estimates. "Clothing and shoes" include nondurable goods only.

Table 2. Annual percentage change in selected indexes of consumer prices

Consumer Price Index	1972	1973	1974	1975	1976 [1]
All items	+3.3	+6.2	+11.0	+9.1	+6.0
Apparel and upkeep [2]	+2.1	+3.7	+7.4	+4.5	+3.5
Men's and boys' clothing	+1.3	+3.7	+7.9	+4.3	+3.3
Women's and girls' clothing	+2.4	+3.5	+6.0	+2.4	+2.6
Footwear	+2.8	+4.2	+6.1	+4.4	+3.5

[1]Preliminary estimates--average for first 3 quarters of 1976 compared with average for first 3 quarters of 1975.

[2]Also includes infant's wear, sewing materials, jewelry, and apparel upkeep services, for which indexes are not available.

Source: Bureau of Labor Statistics.

leadership and to increased prices of fall apparel. Retailers continued to decrease their inventories through markdowns and drastic reductions in future buying.

The seasonally adjusted wholesale price index for textile products and apparel rose 1.4 percent during the period of June through October. Monthly rates for the period were 0.1, 0.7, 0.3, -0.1, and 0.4 percent, respectively. These rates indicate the probability of price increases for apparel at the retail level during the months ahead and make less likely any large rise in average spending on clothing in dollars of constant value. Consumers are likely to be quite selective in their purchases of apparel as they seek attractive price-value relationships.

Supplies of raw materials. Production of textile mill products fluctuated only slightly from month to month during the first 7 months of 1976. Average production was about 36 percent higher than at its depressed level during the same period in 1975.

U.S. mill use of fibers in 1976 (based on data for the first 9 months) is estimated at about 54 pounds per capita, including 15.8 pounds of cotton, 0.6 pound of wool, and 37.7 pounds of manmade fibers. This compares with 1975 per capita use of 49.6 pounds, including 14.2 pounds of cotton, 0.5 pound of wool, and 34.9 pounds of manmade fibers. An apparent trend toward natural fibers and a natural look in clothing during 1976 has caused increased demand for cotton and wool.

During the period of 1965 to 1973, mill use of all fibers on a per capita basis generally increased from 43.9 to 59.3 pounds but was lower in 1974 and 1975 than in 1973 (52.4 and 49.6 pounds per capita, respectively). Mill use of cotton on a per capita basis, however, decreased from 23.3 pounds in 1965 to an estimated 15.8 pounds in 1976; mill use of wool decreased from 2.0 pounds to 0.6 pound. Mill use of manmade fibers (which comprise the remaining fiber use) followed the trend of total fiber use.

The 1976 cotton crop is expected to be nearly a fourth larger than last year's crop despite recent deterioration in production prospects. Tight supplies and reduced stocks are expected, however, to prevail during the 1976-77 cotton season due mainly to larger exports (at least a fourth more than for last season).

Cotton prices rose sharply during the 1975-76 season due to increased demand for all-cotton denim and corduroy, as well as greater use of cotton in blends with manmade fiber. Most qualities of cotton are currently priced about 25 to 30 cents per pound higher than a year ago. Prices for mill-delivered cotton are presently about 50 percent higher than for manmade fiber staple.

Average U.S. mill use of cotton for the first 9 months of 1976 was approximately 20 percent higher than the average mill use of cotton during the same period in 1975. Current high prices of cotton in relation to other fibers and tight cotton supplies may encourage greater substitution of manmade fiber for cotton; thus, U.S. mill use of cotton may be moderately smaller during the 1976-77 season.

U.S. wool production in 1976 is estimated at 10 percent below 1975 and 18 percent below 1974. The decrease in wool production during the past several years has been attributed to a decrease in the number of sheep and lambs, as well as to a decrease in the average fleece weight. Strong wool prices resulted in a 15-percent reduction in commercial slaughter of sheep and lambs during the first half of 1976, compared with the same period in 1975. If this reduction in slaughter levels continues through 1977, U.S. wool production may stabilize or possible increase.

U.S. farm prices of wool have moved upward since mid-1975 due to greater demand and smaller domestic supplies. Prices are expected to increase moderately during the next few months.

U.S. mill use of raw apparel wool for the first 8 months of 1976 was 25 percent higher than during the same period in 1975. Domestic demand (mill use plus import-balance) between January and August of 1976 was approximately 51 percent higher than during the same period a year earlier. Such a strong increase in demand reflects the fashion trend towards the natural look and the renewed interest in wool as a natural fiber for use in sweaters and men's vested suits. The outlook for wool during the 1976-77 period includes strong demand, resulting in relatively high mill use and imports of wool textiles. Consumers are likely to see more wool and wool blends in the market.

Shipments of manmade fibers by U.S. producers during the first 8 months of 1976 were approximately 16 percent higher than in the same period in 1975, according to the September 1976 issue of TEXTILE ORGANON.

According to trade reports, demand for polyester filament was very weak during 1976 because of the shift in apparel styles from knit fabrics towards the natural look of woven or spun fabrics. Polyester filament producers made sharp production cutbacks during most of 1976 while numerous double-knit textile plants closed as a result of the slack in the polyester filament market. Filament prices dropped steadily during 1976. DuPont, the largest producer of polyester filament, steadily cut the price of polyester feeder yarn from a high of 87 cents per pound during the early part of the year to 50 cents per pound in October. Trade sources expect that further price decreases may be averted during the latter part of 1976 as a result of sharp production cutbacks.

As of October 27, 1976, trade reports indicate the following trends. The price of polyester staple is expected to increase as a result of increased demand for the fiber by domestic mills. Mills are expected to switch production from 50/50 to 65/35 polyester-cotton blends for bedsheets and printcloth because of high price and scarce supplies of cotton. There may also be a shifting from all-cotton to low-blend polyester-cotton for a substantial portion of the denim market, primarily for improved performance. By increasing the price of polyester staple, polyester producers hope to recover the losses incurred by polyester filament.

A price increase for rayon also is anticipated because of increased demand for rayon by mills seeking to replace relatively expensive cotton with cheaper rayon staple. Prices for acrylic staple, which increased in recent months, may continue to do so for the remainder of 1976. Acrylic simulates the natural-fiber look of wool and is benefiting from the strong market for sweaters. According to fiber producers, the above price increases of polyester staple, rayon, and acrylic are necessary in view of increasing costs of raw materials and production.

RETIREMENT OF VIRGINIA BRITTON

Virginia Britton, known to most FAMILY ECONOMICS REVIEW readers for her work on clothing budgets and the annual outlook for clothing and textiles, retired on October 12, 1976, after 17 years of service with USDA. Dr. Britton worked with every major nationwide expenditures survey, beginning with the Consumer Purchases Study of 1935-36. She taught at Pennsylvania State University, University of Akron, Kent State University, and the University of Maryland. She authored many papers and research reports and a college textbook on personal finance.

THE OUTLOOK FOR FOOD SUPPLIES AND PRICES[1]

by James R. Donald[2]

The current food situation is highlighted by: Large supplies due to fairly good crop harvests and heavy output of livestock and poultry products; relatively strong demand both here and abroad; and marketing costs that are rising in line with general inflation in the U.S. economy. All this adds up to the relative stability we saw in retail food prices in 1976. The 1977 outlook is for continued generous food supplies. Prices will be fairly stable at the start of the year but will increase in the spring if beef supplies tighten as expected.

[1] This article is condensed from a paper given at the National Agricultural Outlook Conference in November 1976, at Washington, D.C. The complete paper may be ordered from the Consumer and Food Economics Institute (see inside cover page of this issue of *Family Economics Review* for address).

[2] Deputy Outlook and Situation Officer, Economic Research Service, U.S. Department of Agriculture.

Prices and Consumption During 1976

The combination of the farm price of food and marketing costs determines the price of food to consumers. There are several ways to measure food prices or costs. USDA computes the retail cost, as well as the farm value and farm-retail price spread, for a market basket for farm foods, based on data from the Bureau of Labor Statistics (BLS). BLS includes a measure of retail food prices in its Consumer Price Index. Food accounts for about one-fourth of this index. The food index, itself, includes two components: Food consumed at home or purchased in grocery stores accounts for most of the total, with food consumed away from home accounting for about one-fifth. The food-at-home component is weighted slightly more toward livestock products than crop foods.

With food supplies outpacing demand, farm food commodity prices have been easing since the summer of 1975 due to a decline in farm value, a measure of returns to farmers for food products. The *farm value* of the market basket of farm food commodities averaged nearly 4 percent below 1975. Livestock-related foods—particularly meat animals—showed the greatest decline. Crop-related foods generally were under less downward price pressure.

Although the farm value of the food market basket has declined in 1976, the retail cost of the basket of farm foods averaged slightly higher. A rise of about 5 percent in the *farm-retail spread* accounted for the small rise in the retail cost of domestically produced foods. While the spread widened in 1976 because of higher marketing costs, largely reflecting wage settlements and higher packaging and transportation costs, the increase is only about half the 1975 advance. Among major foods, price spreads increased the most for those commodities showing the sharpest price declines at the farm, including beef, pork, and bread.

If consumers purchased only domestically produced farm foods from grocery stores, they would have paid about 1¼ percent more for food in 1976 than a year ago. However, consumers also buy imported foods, such as coffee and fishery products. Taking these purchases into account, we push up average retail food prices by slightly more than 1 percentage point—to an average increase of nearly 2½ percent for all food consumed at home.

Finally, consumers do not purchase their total food needs in grocery stores. That is, they eat away from home in places like restaurants and pay for the services of someone else to prepare and serve meals. Taking this into account tacks nearly another percentage point onto the food price increase for 1976.

All told, taking into account farm-produced foods, imported foods, fishery products, and meals eaten away from home, the prices consumers pay for food averaged around 3 percent more in 1976 than in 1975. Still, this was sharply below 1975's 8½ percent increase and was the lowest annual rate of increase since 1971.

With record-large food supplies and higher consumer incomes, U.S. per capita food consumption for all of 1976 was up a little over 2 percent from 1975 and was nearly equal the record high of 1972. Consumption of crop foods, where 1976 supplies were supplemented by large carryovers from 1975 crops, was up slightly over 1 percent, while animal product use was about 3 percent higher. The combination of 2 percent larger consumption and 3 percent higher prices meant a rise of about 7 percent in *consumer expenditures* for food. Food spending, however, did not match the rise in disposable personal income; so the percentage of income spent for food averaged slightly less than the 17.1 percent in 1975.

Food Outlook for 1977

Large food supplies will continue to slow the rise in food prices during the first half of 1977. At the same time, demand expansion and rising marketing costs will put upward pressure on food prices. On balance, a retail food price increase of about 3 percent is in prospect for the first half of 1977. However, the seasonal pattern of food price movements may shift as 1977 unfolds, mostly due to a reduction in beef supplies by next spring.

During the first quarter of 1977, a price increase of 2 or 3 percent is expected over a year earlier, mainly reflecting increasing prices for coffee, some produce items, and higher marketing costs and restaurant meals. By next spring, food price increases may be a little sharper if the economy is strong and beef output declines as expected. Prospective higher farm prices, coupled with marketing costs 5 to 6 percent above the spring of 1976, may lead

to food price increases averaging 3 or 4 percent above last spring.

Crop supplies and livestock product output during the first half of 1977 generally depend on plans and actions already taken by producers. The second half of this year is less certain. On the crop side, farm prices this winter and next spring, along with growing and harvesting conditions, will greatly influence crop supplies during the summer and fall of 1977. Relatively favorable crop prices are indicated if demand continues as strong as expected, and these prices should lead to large 1977 plantings, particularly for soybeans.

Prospective 1977 crop developments also will influence production plans for livestock and poultry. Output of animal products should remain large in the second half of 1977, especially if supplies and prices of feed are favorable to livestock and poultry producers.

Cattle are a key to the outlook. If fed cattle prices improve this winter and next spring as expected, cattlemen will likely increase placements on food and reduce the number of animals going to slaughter directly off grass during the first half. This points to a little larger beef production in the second half. Coupled with continued relatively large pork, poultry, and milk output, animal product supplies will continue at a high level, although below the level of the second half of 1976.

On balance, 1977 looks like a year of fairly generous food supplies for consumers, with another year of only moderately rising retail food prices.

The Long-Term Outlook

Since 1973 most of the increase in retail food prices can be attributed to increased marketing costs, including transportation, packaging, and labor costs.

As we move into the future, both the level of food prices and year-to-year changes will depend heavily on factors related to *general price inflation*, *food production* both here and abroad, *productivity* throughout the sectors of the food system, *food demand*, and *government policy*.

The impact of these factors on retail food prices will be reflected through marketing costs and farm prices. Marketing costs have become increasingly tied to *inflation*, or the overall cost of living, and this is likely to remain true in the future. If upward cost pressures continue as expected in the economy, marketing costs will rise. For example, about one-half of total food marketing costs are accounted for by labor, and, currently, wage contracts of at least one-sixth of food industry employees include cost-of-living adjustment clauses that are tied to the CPI for all items (*1*).[3] Also, wages of nonunion and management employees usually follow changes in collective bargaining agreements. Transportation and packaging costs, the next two largest components of food marketing charges, will be responsive to rising energy requirements and generally higher operating costs.

On the *production* side, the world has the potential to produce adequate food supplies. Questions center around the level of farm prices needed by producers to cover the cost of producing food and the impact of weather, disease, and pests on the food supply. In the United States, farmers have the capability to produce sufficient food for current domestic and export needs, but uncertainty centers around production costs and product prices needed by U.S. producers to expand production to meet growing food markets.

Developments in the 1970's suggest the possibility of a continued high level of exports and considerable year-to-year variability because of changing conditions abroad.

The total quantity of food that U.S. farms will supply, and at what prices, is related to production costs and the *productivity* of resources used by farmers. Upward cost pressures are likely to continue in the farm sector, especially for inputs related to energy, labor, and environmental quality. Among other inputs, a key question centers around the cost of feed. For example, feed cost rises would increase the cost of finished cattle and could result in the cattle industry's becoming more dependent on roughages, and thus tend to reduce productivity gains in feeding (*2*).

For both crops and livestock, there is further potential for substituting capital for other inputs, such as labor, and continuing output gains from adoption of available technology (*3*). However, total farm productivity has slowed in recent years. Annual gains of 1 to 1½

[3] Numbers in parenthesis refer to References at the end of this article.

percent to 1985 are projected by the Economic Research Service, and realization of these gains assumes that yields will be subject to "the average weather conditions that prevailed during 1950-72" (*4*).

The projected rate of productivity gain probably will not fully offset the impact on production of rising costs since these costs may rise more in line with prices for chemicals, fertilizers, and energy. Even if productivity gains hold per unit food production costs and farm prices constant, expanding demand will likely exert upward pressure on farm prices in some years.

The worldwide *demand* for food products likely will continue to expand with rising world population and increasing per capita incomes. It is generally agreed that the United States can remain a competitive producer of food commodities in relation to other countries. This implies that the United States can maintain a significant share of world food trade, with a continued strong export demand for U.S. food products. However, world trade expansion could slow as countries abroad strive for greater self-sufficiency in food production. In this case, the rate of U.S. export growth may not match that of recent years.

U.S. per capita food consumption may continue to be relatively stable or may increase slightly, the use of processed foods and fresh meats continuing to show the fastest gain. This suggests little, if any, change in the farm value as a percentage of retail cost because of these shifts since farmers' small share of processed foods likely will be offset by their large share for meat.

Retail food prices—and especially year-to-year variations in prices—also could be affected by government policy. Governments can influence both farm and retail food prices through farm programs or retail price stabilization programs. Governments generally use indirect methods to moderate the impact of changes in food supplies and demand on farm retail food prices, such as the recent U.S. grain trade arrangements with several countries.[4] Reserve food stocks represent another indirect method, either through stocks owned and held by the government or through privately owned and held stocks with assistance from the government. Actions may be related to international trade, including export embargoes, taxes and subsidies, adjusting tariffs and quotas on imports, trade arrangements, and commodity agreements.

In looking ahead, most indications point to a desire of countries to assure their producers reasonable incomes and to assure their consumers adequate food supplies, whether through domestic production or trade. In either case, these indications point to closer economic ties among countries and perhaps relaxation of trade barriers, particularly to meet production deficits.

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[4] The United States has grain arrangements or agreements with 5 importing countries, including the Soviet Union, Taiwan, Japan, Poland, and Israel. These arrangements generally cover 3 to 5 years, beginning in 1976, and were made to help assure U.S. farmers of markets, while helping protect both U.S. producers and consumers from large variations in prices.

References

(1) Barr, T. N., and Blanciforti, L. A. Forecasting retail food prices: A look at the future and an appraisal of controls and input costs. Paper presented at the Annual Conference of the Western Economics Association, San Francisco, Ca., June 1976.

(2) Allen, G. C. Feed utilization for beef production. *Feed Situation.* U.S. Dept. Agr., Economic Research Service, Rpt. No. FdS 262, pp. 16-20, September 1976.

(3) Farrell, K. R. Structure and organization of agriculture, 1980-85. Paper presented at the National Farm Marketing Conference of the National Agricultural Marketing Association, Minneapolis, Mn., May 1976.

(4) Smith, A. G. Commodity production and utilization projections to 1985. *Agriculture The Third Century.* U.S. Dept. Agr., Economic Research Service, Rpt. No. 2, 4 pp., July 1976.

OUTLOOK FOR HOUSING AND MORTGAGE MARKETS[1]

by Marshall A. Kaplan[2]

Before dwelling on the housing market in detail, let me give you the underlying economic and financial assumptions behind my housing forecast. I am assuming that the current weakness in the economy will probably come to an end soon, although the economy is not likely to pick up strongly for some time ahead. The pickup in the economy by itself would not likely cause much of a rise in interest rates except that the prospects for inflation do not seem good to me.

The rise in the Consumer Price Index has been close to a 6 percent per annum figure over the last 6 months, and the behavior of wholesale prices has been even worse. This has occurred despite large declines in the prices of most meats and poultry, which inevitably are bound to level off and turn around. Skipping over the many other factors involved in making a price forecast, I merely express my belief that we may be experiencing increases in the Consumer Price Index close to 6 percent per annum in 1977.

Such an inflation outlook will tend to push up interest rates more rapidly than the outlook for economic growth, by itself, suggests. This is because interest rates contain a substantial inflationary premium and are going to be sensitive to changes in prices. As a result, I expect that the 3-month Treasury Bill rate, which is currently about 4.9 percent, could rise above 6 percent toward the end of 1977. Since short-term interest rates are the major factor in determining the flow of funds into savings and loan associations (S&L's) and general housing credit availability, this suggests a financial climate in 1977 that is not as good as what we currently have.

Nonetheless, the flow of funds into S&L's in 1976 has been exceptional, and it would be surprising if this flow could be duplicated in 1977. Savings flows could well reach a record $51 billion in 1976, to which we have to add $38 billion from loan repayments as a further source of funds for mortgage money. Since I don't expect any real sharp runup in interest rates during most of 1977, savings flows could still be quite substantial for S&L's even though they might be down from the 1976 record. Interest rates on new mortgage loan commitments have come down somewhat recently so that we will be going into 1977 with mortgage interest rate levels that are favorable by recent historical standards. In terms of mortgage interest rates, the early part of 1977 may well be a good period for home buyers, but as the year progresses mortgage interest rates are likely to creep up again.

Let me turn now to the internal dynamics of the housing market split into its two major categories—single-family housing and apartments. I will not touch on mobile homes, despite their importance to the housing market, because I lack the kind of data on mobile homes necessary for a careful analysis of the prospects for this segment of the housing market.

Single-Family Housing

My forecast for the number of single-family starts (new housing units) for 1977 is 1.2 to 1.3 million. This number represents a 50,000 to 150,000 unit increase over the 1976 estimate of 1.15 million single-family starts.

I do not believe that single-family starts in 1977 can exceed the record level of 1972 because the 1972 starts were aided by two factors that are not present in today's housing market. One was a boom mentality among builders that led them to add a large number of housing units to their unsold inventory in anticipation of future sales. There is not much speculative building of this type going on today. The other was the very large number of federally subsidized single-family units started

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[1] This article is condensed from a paper given at the National Agricultural Outlook Conference in November 1976, at Washington, D.C. The complete paper may be ordered from the Consumer and Food Economics Institute (see inside cover page of this issue of *Family Economics Reivew* for address).

[2] Director, Special Studies Division, Office of Economic Research, Federal Home Loan Bank Board.

in 1972 under the Section 235 program.[3] In 1977 we will be getting an increasing number of units under the revised Section 235 program, but the number of units will still be much smaller than in the early 1970's and the revised program involves a shallower subsidy than the original program.

An important aspect of the single-family market that is likely to persist into 1977 is the increasing share consisting of units that are not on the market for sale. These units are being constructed to order for the owner and some are being constructed by the owner himself. An unusally large number of single-family starts are currently in nonpermit issuing areas, which are generally rural or are at least beyond current suburban areas. These units do not get into the sales statistics and may explain why single-family starts this year have improved much more than official statistics on new home sales indicate. Thus, the ratio of single-family starts to sales during the first 9 months of 1976 was 1.82 compared with a ratio of 1.64 in 1975.

A major obstacle to a single-family housing boom rather than merely a good year is that housing costs remain a serious deterrent to the ability of builders to construct homes suitable to first-time home purchasers. According to census statistics, the median price of homes sold in September 1976 was $45,200. This represents a 14-percent increase over the same month in 1975. There has been a large regional divergence in the rise in new home prices, with the rise greatest in the West and North Central States, more modest in the Southern States, and least in the Northeastern States. The sharp rise in prices has occurred despite the attempt of builders to economize on the use of expensive land and to eliminate certain frills that used to be standard on homes.

Many factors have contributed to the recent steep rise in new home prices. Perhaps the major one has been the increase in the cost of developed land, where environmental and zoning factors have tended to hold down the supply. Over the past year, lumber and plywood prices have risen much more sharply than we would have expected based on the only modest increase in housing starts.

Let me put the escalation of housing prices in historical perspective. It is true that home prices have been outrunning family income in recent years so that the ratio of the median family income was up to 2.86 in 1975 compared with 2.39 in 1970. However, the median sales prices in the early 1970's were held down by the low prices on heavily subsidized Section 235 houses. The ratio of house prices to family income in 1975 was about the same as during the 1960's. It is only in the last year that this ratio may be above the historical norm.

In my opinion, it is not so much the price of new homes that has been a deterrent to home sales but the sharp rises in the operating cost of homes as reflected in much higher utility bills, real estate tax payments, home insurance payments, and the cost of maintaining a house. In fact, in light of these factors, it is amazing that the single-family market has been as strong as it has been in 1976. It appears that households are willing to allocate a larger percentage of their budget for housing. Undoubtedly, the single-family housing market has been stimulated because of the high rate of household formation, the continued strong attachment of the average household to home ownership, and the increasing number of households in which both spouses work.

In analyzing the single-family market, we must take into account the majority of housing starts that are desinged to permit existing home buyers to purchase a better home. These buyers already own an existing home and can afford a new and more expensive home because of the large equity that they have already accumulated in their present home.

The same situation is not true for first-time home purchasers. They are finding the going much rougher. It is likely that a higher percentage of them are buying existing homes, rather than new homes, since existing homes are generally cheaper. The gap between the median price of new and existing homes has been narrowing in recent years, however. In this connection I should note that we develop a distorted impression of what is going on in the

[3] Section 235 of the 1968 Housing Act provides for direct homeownership subsidies to families unable to purchase a home on the private market. Under the program, eligible families pay a set percentage of their income for mortgage payments, and the Government pays a subsidy directly to the mortgage lender to make up the differences between the families' contribution and actual mortgage payment requirements.

housing market by focusing too much on housing starts. Normally far more existing homes are sold than new homes and, at the present time, the ratio of existing home sales to new home sales is even higher.

In September 1976 there was a seasonally adjusted annual rate of 3,330,000 existing homes sold. This compares with 734,000 new homes sold. Another factor to remember is that there has been a sharp increase in spending by existing homeowners for additions to their home or for major remodeling jobs. This means that there is a substantial improvement in the existing housing stock that does not get reflected if we look at housing starts. This is contributing to a more efficient utilization of the existing housing stock.

Multifamily Housing

The apartment market has been the weakest sector of the housing market since housing starts began to recover in the second quarter of 1975. Apartment starts remain far below the peak reached in the early 1970's. While almost 1 million apartment units were started in 1972, only 234,000 units were started last year. We have truly had a boom and bust cycle in apartment construction.

However, the rate of apartment construction in the early 1970's was fueled by considerable overbuilding, in part due to an overwillingness of lending institutions to provide funds available as a result of easy credit. You have all heard what has happened to real estate investment trusts, which did much of the construction lending for apartment projects. Other lending institutions also have suffered as a result of losses incurred on many of these new structures. The result has been to make everyone—builders and lenders alike—rather cautious about putting up new apartments, whether rental or condominium. This caution has made lenders scrutinize new apartment projects carefully and demand clear evidence of profitability.

Construction of apartment units has been held down by a lack of profitability in many areas of the country. Thus, last September the index of rents in the Consumer Price Index was only 5.6 percent above that of a year ago. This is quite modest when we consider the large increase in both construction and maintenance costs in recent years. Over a longer period of time the rise in rents has been lagging behind consumer prices in general.

With the low level of multifamily construction over the last several years, we should be expecting a tightening in the rental market, which is beginning to occur. Thus, on a seasonally adjusted basis, 85 percent of rental multifamily units completed in the first quarter of 1976 were rented within only 3 months. This is a substantial improvement in market absorption over that of recent years. There has even been a fairly good improvement in the market absorption of condominium units coming on the market, although the absorption rate in this area of the apartment market is still well below that of several years ago. There has also been a decline in the national rental vacancy rate from a range of 6.0 to 6.3 percent during 1974 and the first three quarters of 1975 to 5.7 percent in the third quarter of 1976. I would have expected an even larger decrease in the vacancy rate, but it may be that the combined impact of recession and inflation has continued to hold down the number of those who can afford to occupy their own apartment unit and that demographic factors are becoming relatively more favorable for single-family housing.

OUTLOOK FOR ENERGY[1]

by Jerry Ann Penno[2]

Supplies and Prices

U.S. production of oil peaked in 1970 and has since been declining. Our consumption of foreign oil, on the other hand, has *risen* from 36 percent before the embargo of 1973 to 40 percent in 1976. The bill for these imports climbed from $3 billion in 1970 to $27 billion in 1975 and was expected to reach $34 billion in 1976—an amount equal to $160 for every man, woman, and child in this Nation! Increased oil prices could mean unemployment, reduced consumer spending, and slower economic growth; and these prices could add as much as 2 cents per gallon to the pump price of gasoline.

The outlook for natural gas, the energy source used by over 50 percent of the industrial sector and by over half of residences for home heating, is not much better. Production of natural gas has declined by 13 percent since 1973. Proved reserves reported for 1975 are at the lowest figure in 24 years. In many parts of the country, shortages of gas have forced gas companies to place a moratorium on new or additional gas service. This is most unfortunate at a time when the economy is recovering and housing construction is up. As a result, consumers in many places have had to turn to more expensive fuels, such as electricity.

The overall economic impact of these chronic gas shortages will depend on the weather, the capability of the curtailed users to switch to alternative fuels, and the ability of gas companies and other large consumers to avail themselves of measures to purchase emergency supplies of natural gas. Depending on the severity of these factors, there is always the threat of production slowdowns or shutdowns. In addition, if a given industry is able to continue production by switching to an alternative fuel, the higher costs of conversion to these fuels will be passed along in higher costs of products to the consumer.

Our coal reserves account for 90 percent of U.S. energy reserves—around three times the energy contained in Middle East oil reserves. Yet, because oil and gas prices were so low in the past and because environmental legislation has made it difficult to mine and burn coal as a fuel source, coal has accounted for only a small portion of our energy use, a large percentage of which is used by utilities. Increased use of coal will require new technology to mine it, to transport it, and to burn it with minimum harm to the environment. Costs associated with increased production and pollution devices will increase the final cost of coal to utilities. These costs, of course, will result in increased electric bills.

Legislation and Programs to Conserve Energy

To help secure the Nation in the event of an embargo, legislation proposed during 1976 authorizes the building of a strategic petroleum reserve of at least 150 million barrels of petroleum by 1978 and up to a billion barrels by 1982. Legislation also authorizes establishment of standby measures to deal with any severe emergency that may arise. The United States is working with other nations to develop international cooperative contingency plans.

To help increase domestic supplies of oil, new legislation authorizes the full development of four Naval Petroleum Reserves in the United States. Price controls of crude oil will be gradually lifted and will be completely phased out by 1979 to aid oil producers with the costs of exploration and drilling. To aid consumers who have already been hurt by high oil prices and overall inflation, prices will rise gradually so as not to cause severe economic strain.

To increase energy conservation and reduce energy growth from 3.4 to 2.5 percent per year is one of the main goals of U.S. energy policy. Many conservation measures taken to achieve this reduction will directly affect consumers by helping them to save energy and, therefore, dollars. As industries find better ways to conserve energy used in production, their savings

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[1] This article is condensed from a paper given at the National Agricultural Outlook Conference in November 1976, at Washington, D.C. The complete paper may be ordered from the Consumer and Food Economics Institute (see inside cover page of this issue of *Family Economics Review* for address).

[2] Director, Office of Consumer Affairs/Special Impact, Federal Energy Administration.

hopefully will be reflected in lower costs for products and services.

Appliance manufacturers are now required to provide energy efficiency information on the labels of major appliances. This information will help consumers make comparative judgments on initial cost versus operation costs of appliances. A program to educate consumers on the use of energy labels is now being prepared and will be ready for implementation after basic decisions on the exact content of the labels are made. The Federal Energy Administration is working with the industry to set overall goals for better appliance efficiency.

Auto manufacturers are now producing cars and lightweight trucks that achieve improved gas mileage. Mandatory fuel economy standards require an average of 18 miles per gallon by 1978 and 20 miles per gallon by 1980. These standards will result in better designed cars, more efficient engines, and savings for consumers. Auto dealers are also required to make available the "1977 Gas Mileage Guide for New Car Buyers" in their showrooms. This new guide, which is a joint effort of the Federal Energy Administration and the Environmental Protection Agency, divides automobiles into different size classes according to their interior measurements, which are considered to be more meaningful to consumers than the traditional exterior measurements. The guide also shows the gasoline mileage achieved under test conditions. All this information should help buyers of new cars to better compare the fuel economy of similar sized vehicles.

In addition, all new 1977 and later model cars and light trucks will carry a label disclosing the fuel economy, the average fuel cost of operating the vehicle, and the range of fuel economies of the cars in its class.

New programs leading to energy savings for homeowners also are being developed as a result of legislative action. The Secretary of the Department of Housing and Urban Development must develop standards for energy efficiency in new residential and commercial buildings within 3 years. States are required to adopt thermal building standards within 1 year. Construction costs as they relate to energy savings will be considered in developing all standards. The new homes should save consumers many dollars in their fuel bills.

Although the initial cost of solar-space heating and hot-water systems is expensive, these systems offer substantial economic benefits over their lifetimes to residential users. Their advantages, which become evident when considering lifetime costs, are not obvious to the potential consumer, however. Because these devices are new, the resale market has not yet had the opportunity to reflect their life-cycle value in resale prices. Doubt over future resale values sometimes influences lending institutions. Lack of experience and lack of standards also make obtaining warranties difficult. To help remedy this situation, Congress has passed new legislation that authorizes $2.5 million for the Federal Energy Administration (FEA) in fiscal year 1977 to develop a national strategy to help commercialize solar energy. Mass production and increased markets for solar heating and cooling systems are needed to make the systems more reasonably priced and consequently more popular with consumers.

To help consumers get answers to their questions regarding solar energy, The Energy Research and Development Administration and the Department of Housing and Urban Development have contracted with the Franklin Institute to operate the National Solar Heating and Cooling Information Center. Consumers anywhere in the United States who want information can call toll free (800) 573-2929 and speak to staff at the center.

Aid to Consumers

Families with low and fixed incomes have suffered the most from high fuel prices. After cutting back their energy use as far as possible, they have sometimes had to choose between heating their homes and other necessities, including food. Their homes are often the least likely to be well insulated, and they cannot afford to remedy the situation.

The Weatherization Assistance Program that was recently legislated by Congress to help solve this problem will help low-income persons by insulating over a million residences of low and fixed-income people. FEA will make grants to States, which may in turn allocate the funds among local governments and community action agencies to administer the program. All low-income households will be eligible to receive weatherization assistance. Which resi-

dences to insulate will be determined by the State or local agency administering the program. Under the program, $55 million is authorized for fiscal year 1977, $65 million for fiscal year 1978, and $80 million for fiscal year 1979. At least 90 percent of the funds must be spent on such weatherization materials as ceiling insulation, caulking, weather stipping, and storm windows, rather than on administrative costs.

The high cost of utility bills, of course, has been an increasing concern, if not the major energy concern, of *all* consumers. Besides the high cost of fuel that has been passed on to consumers in their bills, the cost of construction of new plants, as well as the daily costs of management, has increased with inflation. These costs often are reflected in a higher rate base. The utility companies also are having problems because of the higher costs. They are required by law to deliver electricity on demand but find it increasingly difficult to raise the capital necessary to construct new plants needed to generate electricity during high demand periods.

FEA has funded a number of utility rate demonstrations to find solutions to these problems that will be equitable for both consumers and utilities.[3] The majority of these projects are testing the pros and cons of peakload pricing. Peakload pricing would provide households with an opportunity to save money on their utility bills by changing consumption patterns of electricity. Conceivably, families who do their dishes and laundry at offpeak hours—late at night or early in the morning—could save money.

Another demonstration program is testing the pros and cons of a lifeline rate. This rate would charge consumers who qualify and who use a certain minimum amount of energy a special low rate. Those who use more than the minimum would be charged at an increasing rate for that which is used above the minimum. Present rate structures usually charge less for electricity used above a certain amount. The lifeline rate could be an aid to low-income consumers who usually use less electricity and who are having an especially hard time paying their utility bills.

At the Federal level, the Federal Energy Administration has been actively working to develop consumer information and has produced three films especially for use with consumer audiences. "When the Circuit Breaks," 27½ minutes, explains the reasons for the energy problem and some resource development and conservation measures needed to solve it. "Don't Cut Us Off," 16 minutes, shows what four American communities have done to ease the energy budget problems of low-income and elderly citizens. "Up the Power Curve," 10 minutes, gives energy conservation tips that all people can practice. These movies are available for free from Modern Talking Pictures, New Hyde Park, N.Y. 11040.

[3] A report on these demonstrations is available from the Federal Energy Administration, Washington, D.C. 20461.

ENERGY EXPENDITURES AND APPLIANCE OWNERSHIP OF FARM-OPERATOR HOUSEHOLDS

by Marilyn Doss Ruffin

Energy has been a growing concern in the budget of many families. Information about farm family spending for energy for family living purposes and ownership and purchase of major energy-consuming appliances by farm families was collected by the U.S. Department of Agriculture as part of the 1973 nationwide Survey of Farm-Operator Family Living Expenditures.[1] Special tabulation of that part of the survey is presented here, along with relevant information from the 1970 Census and the 1973-74 Surveys of Purchases and Ownership of the U.S. Department of Commerce and from the 1972-73 Survey of Consumer Expenditures of the U.S. Department of Labor.

Household Energy Expenditures

Farm families have heavy expenditures for household energy. Nearly all farm-operator households reported expenditures for one or more fuel and utility categories, compared with 90 percent of all U.S. households. The average expenditure for farm operator households was about a fifth higher than the expenditure for all U.S. households (table 1).[2] Compared with all U.S. households, a higher percentage of farm-operator households had expenditures for electricity, for bottled and tank gas, for fuel oil and kerosene, and for coal and wood. Fewer farm households reported expenditures for utility (piped) gas.

Expenditures for Major Equipment

Farm families had substantial expenditures for inventories of major appliances. Although net farm income in 1973 was double that of 1972, appliance expenditures per household averaged about the same. In 1973 the percentage of farm-operator households who reported purchases of major appliances for their own use was about 33 percent higher than that of all U.S. households (42 and 32 percent, respectively); the average expenditure per farm-operator household was about 50 percent higher than the average for all U.S. households.[3] Conversely, average spending by survey households for laundry and drycleaning services was less for farm families ($40 compared with $79).

Among farm-operator households who reported purchasing major equipment in 1973 for use by the household, three-tenths spent under $200; four-tenths spent $200 or more, but less than $500; and three-tenths spent $500 or more. Except for families at the lowest income levels, average expenditure rose with income (table 2). Why average expenditure was so high for families with income under $5,000 is not clear. It may be that these families started the survey year with a lower inventory of owned appliances and were forced to do some "catching up." Some likely were acquiring for the first time such appliances as automatic washers or vacuum cleaners or perhaps clothes dryers—appliances that, while not necessities like the stove and refrigerator, do add greatly to the convenience of housekeeping. An additional factor to consider is how well the reported after-tax income for 1973 reflected the family's usual annual income and level of living.

When families were classified by age of head, mean expenditure for families reporting an expenditure was highest when the head was under 25 and lowest when the head was 65 or over. The younger group were probably building inventory, while the older households may have passed their peak inventory level and may have been replacing only as necessary.

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[1] For more information on the survey see U.S. Department of Agriculture, Statistical Reporting Service, *Farm-Operator Family Expenditures for 1973*, SpSy6(9-75), September 1975.

[2] Unless otherwise stated, expenditures for "all households" are derived from U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey Series: Interview Survey, 1972 and 1973*, Rpt. 455-2, 1976, table 1b.

[3] Expenditures reported in this sentence exclude purchases of television sets and range hoods to make farm family data comparable with U.S. household data reported by the Bureau of Labor Statistics.

Table 1. Fuel and utility expenditures, farm-operator households and all U.S. households, 1973

Expenditure item	Farm-operator households		All U.S. households	
	Average expenditure for households reporting expenditure	Percent of households reporting expenditure	Average expenditure for households reporting expenditure	Percent of households reporting expenditure
	Dollars		*Dollars*	
Electricity	231	96	213	77
Gas (in mains)	186	9	173	45
Combined gas and electric ...	404	2	308	15
Bottled or tank gas	237	49	164	10
Fuel oil and kerosene	257	35	278	20
Coal and wood	131	11	--	([1])
Other fuels	10	4	48	10
Total [2]	473	[3] 99	405	[4] 90

[1] Included with "other fuels."
[2] In addition, 26 percent of farm-operator households produced fuel on the farm, with an average value of $136 per household reporting.
[3] Based on households reporting any expenditure for utilities and public services.
[4] Based on households reporting any expenditure for fuels and utilities.

Sources: Derived from U.S. Department of Agriculture, Statistical Reporting Service, *Farm-Operator Family Expenditures for 1973*, SpSy6(9-75), September 1975, tables 5 and 6; and U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey Series: Interview Survey, 1972 and 1973*, Report 455-2, 1976, table 1b.

Ownership and Purchase of Major Equipment

While most U.S. households (both farm and nonfarm) had the use of several major appliances in their homes, a larger percentage of all U.S. households, rather than farm-operator households, reported having appliances they did not own. Most of these nonowned appliances were probably included in rental housing units. One-fourth of all U.S. households had available for their use a range they did not own, one-fifth had available a nonowned refrigerator, and a few (less than 5 percent for any given appliance) had nonowned freezers, washers, dryers, or dishwashers available (table 3). By comparison, less than 1 percent of the farm-operator families reported having in the household a given appliance that was not owned. For major appliances where comparison is possible, a larger percentage of farm-operator households reported ownership than did all

Table 2. Expenditures in 1973 for purchase of major household equipment, farm-operator households[1]

Population	Average expenditure	Percent reporting expenditure	Average exp. for households reporting exp.
	Dollars		*Dollars*
All farm-operator households	200	50	397
Income after taxes			
Under $5,000	196	48	412
$5,000 to 7,499	178	49	366
$7,500 to 9,999	177	49	362
$10,000 to 14,999	209	53	396
$15,000 to 19,999	203	50	404
$20,000 and over	250	56	443
Age of head			
Under 25	275	54	513
25-34	186	50	376
35-44	217	52	417
45-54	212	51	418
55-64	192	51	374
65 and over	168	46	364

[1]Expenditures in 1973 for purchase of new and used major equipment for use by household. Includes cooking stove, refrigerator, freezer, dishwasher, washer, dryer, garbage disposer, range hood, electric floor care equipment, sewing machine, television, window air-conditioning unit. Includes installation charges, if any. Based on year-of-acquisition concept.

Source: Special tabulation by U.S. Department of Agriculture, Agricultural Research Service, Consumer and Food Economics Institute, of unpublished data from the 1973 Farm Family Living Expenditure Survey, USDA, Statistical Reporting Service.

Table 3. Ownership and availability of selected major appliances by all U.S. households and households outside metropolitan areas; and ownership by farm-operator households in January 1974 and purchases during 1973

Appliance	All U.S. households. Appliance in housing unit, 1973-74 average		Households outside metropolitan areas.[1] Appliance in housing unit, 1973-74 average		Farm-operator households	
	Available	Owned	Available	Owned	Owned Jan. 1974	Purchased 1973[2]
	Percent of households					
Cooking stove	98.4	75.4	98.6	86.6	99.1	9.3
Electric	--	--	--	--	65.4	6.1
Refrigerator	98.8	80.3	98.9	89.6	98.4	8.7
1	--	--	--	--	84.4	--
2 or more	--	--	--	--	14.0	--
Freezer	32.9	32.6	45.7	45.2	85.5	7.4
1	--	--	--	--	71.3	--
2 or more	--	--	--	--	14.2	--
Dishwasher	27.1	23.1	19.8	18.9	27.1	4.4
Built-in	--	--	--	--	14.8	2.0
Portable	--	--	--	--	12.4	2.5
Garbage disposer	--	--	--	--	6.3	.9
Washing machine	72.3	69.4	77.5	75.8	91.8	10.0
Automatic	--	--	--	--	69.3	8.2
Semi-automatic	--	--	--	--	4.7	0.4
Washer-dryer comb.	--	--	--	--	.9	.3
Other	--	--	--	--	20.2	1.4
Clothes dryer	51.9	49.4	53.1	52.0	66.2	6.3
Electric	--	--	--	--	58.2	5.4
Gas	--	--	--	--	8.2	.9
Electric floor care equip.	--	--	--	--	87.0	10.6
Vacuum cleaner	--	--	--	--	85.4	9.1
Electric broom	--	--	--	--	6.0	.9
Shampooer-polisher	--	--	--	--	9.7	.7
Other	--	--	--	--	1.9	.3
Sewing machine	--	--	--	--	85.9	4.9
Window air-cond. unit[3]	31.9	--	30.0	--	28.9	3.4
Reverse cycle[4]	--	--	--	--	12.3	1.5
Not reverse cycle	--	--	--	--	17.0	1.9
Television	96.4	--	95.8	--	96.6	--
Black and white	--	--	--	--	64.8	6.1
Color	59.0	--	54.2	--	52.4	10.5

[1]Outside standard metropolitan statistical areas (SMSA's).

[2]Households counted as having purchased an item include those who purchased as gifts or rented the item as well as those who purchased for household use. Based on year-of-obligation concept.

[3]Includes units installed in wall of structure.

[4]A reverse-cycle unit is one which is capable of both cooling and heating.

Source: Ownership and availability for all U.S. households and for households outside metropolitan areas is from the U.S. Department of Commerce fall 1973 and fall 1974 Surveys of Purchases and Ownership (SOPO). Reported figures are the average of the two surveys as reported in *Selected Data from the 1973 and 1974 Surveys of Purchases and Ownership*, Bureau of Census, U.S. Department of Commerce, July 1976. Ownership by farm-operator households was obtained through special tabulation by U.S. Department of Agriculture, Agricultural Research Service, Consumer and Food Economics Institute, of unpublished data from the 1973 Farm Family Living Expenditure Survey, USDA, Statistical Reporting Service. Percentage of households purchasing is from USDA, SRS, *Farm-Operator Family Expenditures for 1973*, SpSy6(9-75), September 1975, table 6.

U.S. households or households outside metropolitan areas. About four-fifths of the farm population lived outside metropolitan areas in 1974, constituting about one-tenth of the nonmetropolitan population.[4]

The percentage of farm-operator households owning selected major equipment items is presented in table 3. Owned items include those purchased by the household for its own use, those included in the purchase of the home, and those received as gifts. Households counted as having purchased an item include those who purchased as gifts or rented the item as well as those who purchased for use by the household. Ownership and availability of major appliances by all U.S. households and by households outside metropolitan areas, as reported in the Survey of Purchases and Ownership of the U.S. Department of Commerce, are also presented in table 3.

More than four-fifths of the farm households reported owning a food freezer, compared with one-third of all U.S. households (Survey of Purchases and Ownership, 1973-74 average) and slightly less than one-half of all nonmetropolitan households. Nine-tenths of the farm households owned washing machines, compared with about three-fourths of both nonmetropolitan households and all U.S. households. Two-thirds of the farm households owned clothes dryers; this compares with about one-half of all U.S. households and one-half of all nonmetropolitan households. Dishwashers were owned by about equal proportions of farm households as all households. Comparative information was not available for garbage disposals, floor-care equipment, or sewing machines.

Data from 1970 and 1973 to 1974 indicate that water heaters, cooking stoves, and clothes dryers used in farm homes are electric models more often than those used in all U.S. households. Although information was not collected in the Farm Family Living Survey or the Surveys of Purchases and Ownership on water heaters, information from the 1970 Census of Housing provides a comparison between farm households and all U.S. households. In 1970, while only one-fourth of all housing units in the United States had electric water heaters, more than one-half of all occupied farms used electricity for heating water. More farm households used electricity for cooking, more used bottled or tank gas, and fewer used utility gas. In the Farm Family Living Survey, two-thirds of the households owned an electric cooking stove in January 1974, and two-thirds of stove purchases in 1973 were electric. Almost nine-tenths of the farm-operator households owning a clothes dryer had an electric model; similarly, almost nine-tenths of their purchases were electric.

Implications for Energy Information

About one-half of the farm-operator households reported purchasing a major kitchen, laundry, or floor-care appliance; a television set; or a room air-conditioner in 1973. High percentages purchased freezers and refrigerators, appliances that are major energy consumers, and for which energy consumption varies widely among models. It seems likely that each year many farm families are making decisions in selecting appliances and could make use of information on relative energy efficiencies. The 1973 survey indicates that spending by young farm families may be quite high. Young families, of course, have little experience in deciding which appliances to buy and would seem to have most need for guidance in selecting energy-efficient models.

Most farm-operator households reported owning a food freezer; some owned two or more. Freezers are high consumers of electrical energy. Management practices in their use and care and in their location in the house can make a difference in the cost of operation. This would appear to be another fruitful area for guidance.

With a substantial proportion of farm households having electric water heaters, nine-tenths having washing machines, and over one-fourth having dishwashers (according to the most recent surveys), careful selection and use of these items, as well as care in other uses of hot water, could have an energy-saving impact.

[4] "Outside metropolitan," "nonmetropolitan," and "outside SMSA (Standard Metropolitan Statistical Area)" are used interchangeably. An SMSA is a county or group of contiguous counties containing at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. Contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city. In New England States, SMSA's consist of towns and cities instead of counties. Each SMSA must include at least one central city.

TRANSPORTATION AND FARM-OPERATOR HOUSEHOLDS

by Connie M. Hoerman

Private transportation is a major budget item for farm-operator households. Farm households must rely on private transportation because they usually have limited access to such transportation alternatives as public transportation and carpools. In 1973, expenditures for transportation by farm-operator households accounted for almost 18 percent of total family living expenditures and ranked third behind housing and food. In 1955, however, transportation expenditures accounted for only 11 percent, and ranked fourth behind housing, food, and clothing (table 1).

An increase in the number of vehicles owned by farm-operator households and changes in household size and income may account for the jump in the percentage of expenditures for transportation. For example, according to Census figures, between 1960 and 1970 the percentage of farm households owning at least one car increased from 77 to 87, and the percentage owning two or more cars increased from 16 to 27. Higher incomes and decreased family size during this period probably made this increased vehicle ownership possible. Between 1955 and 1973 the net income per farm increased from $2,429 to $11,727. Family size of farm-operator households decreased from 3.8 to 3.5.

The jump in expenditures for transportation between 1955 and 1973 is especially meaningful in that it occurred during a period in which prices paid by farmers for autos and auto supplies increased less than prices paid for all items used for family living (51 and 58 percent, respectively, according to the Statistical Reporting Service of the USDA). Moreover, most of the data on expenditures in 1973 were collected too early to reflect the large increases in gasoline prices, which began at the end of 1973. The continuing increases in prices for transportation-related items may change or may already have changed the percentage of expenditures that farm-operator households need to allocate to transportation.

Data on expenditure patterns of farm-operator households are from the 1973 Farm Family Living Expenditure Survey. Basic data from this survey were presented at the Agricultural Outlook Conference in November of 1975.[1] This paper presents a special analysis of transportation expenditures of farm-operator households. Data from 2,621 households are included in the analysis. The dollar figures reflect the amount of the household's expense attributable to family living after any percentage from farm or business operation had been deducted.

Vehicle Ownership and Miles Driven

Farm-operator households are more likely to own vehicles and also tend to own more vehicles than is common for all U.S. households. (Vehicles include cars, trucks, campers, and other vehicles owned for at least half the year.) Whereas 96 percent of farm-operator households owned at least one vehicle in 1973, according to data from the Bureau of Census, only 83 percent of all U.S. households did so that year. The percentage of farm households owning three or more vehicles was 17 percent, while that of the general population was only 9 percent (table 2).

Among farm-operator households, those with low incomes were the most likely not to own a vehicle or to own just one, while households with high incomes frequently owned two or more vehicles (table 3). Off-farm income was related to the number of vehicles owned by the households in much the same way as income after taxes was related. (Off-farm income is a before-tax figure that includes income other than farm income, such as wages, salaries, and other transitory sources.) Whereas only about one-tenth of households with low off-farm income owned three or more vehicles, three-tenths of households with high off-farm income owned that many.

The number of vehicles owned per household increased as the number of full-time earners increased. Whereas 7 percent of the households having no full-time earners owned three

[1] Published reports from this survey are available from the Crop Reporting Board, Statistical Reporting Service, USDA, Washington, D.C. 20250.

Table 1. Distribution of family living expenditures for farm-operator households, 1955 and 1973

Expenditure group	1973	1955
	Percent	
Total	100.0	100.0
Housing	28.7	28.1
Food	21.7	25.2
Transportation	17.6	11.4
Clothing	7.0	13.0
Medical care	6.7	7.3
Other [1]	18.3	15.0

[1]Includes personal care; tobacco and alcoholic beverages; reading, subscriptions, memberships and other recreation; education; miscellaneous; personal insurance; and cash gifts and contributions.

Source: Farm-Operator Family Living Expenditures for 1973. USDA, SRS, September 1975, p. 8.

Table 2. Household ownership of vehicles, 1973

Type	Ownership	Farm-operators [1]	United States
	Number	- - - - - *Percent* - - - - -	
All vehicles	0	3.7	16.9
	1	47.6	40.1
	2	31.7	33.7
	3 or more	17.0	9.3
Cars	0	11.2	18.5
	1	62.0	47.6
	2	21.4	28.4
	3 or more	5.4	5.5
Trucks	0	70.9	86.5
	1 or more	29.1	13.5

[1]Number of vehicles owned by farm-operator households excludes vehicles used entirely for farm business and those owned by the household for less than half the year.

Source: Farm data from Farm Family Living Expenditure Survey, special analysis by USDA, CFEI, Fall 1976. U.S. data from unpublished data from the 1973 Survey of Purchases and Ownership, U.S. Department of Commerce, Bureau of the Census, July 1976.

or more vehicles, the percentage of households having two earners was four times as high.

Households headed by persons aged 35 to 44 owned the most vehicles. Those headed by persons less than 35 years old almost always owned at least one vehicle, although most had not yet accumulated a fleet of three or more vehicles as had many of the older households. There was a sharp decline in vehicle ownership for the 65-and-over age group, although less than 10 percent of these households were without a vehicle.

Of the households who owned no motor vehicles during the year, 67 percent were older persons who lived alone or with one other person, and 30 percent were husband and wife households with one or more children present.

Despite the fact that most of the farm-operator households in the survey probably lived some distance from a town or city, these households did not drive more miles per year than is typical in this country. The average number of total miles driven in 1973 was 16,620 for all vehicles not used exclusively for business per farm-operator household. Although no national figures are available for that year, the fall 1974 Survey of Purchases and Ownership by the Bureau of the Census reported the average number of miles driven by all vehicles per U.S. household was 16,800.

Table 3. Vehicle ownership of farm-operator households by selected household characteristics

Characteristics	Number of vehicles owned			
	0	1	2	3 or more
	Percent			
Money income after taxes				
Less than $5,000	8.9	63.6	20.9	6.7
$5,000 to 9,999	2.8	52.4	31.5	13.3
$10,000 to 14,999	1.1	39.5	36.9	22.6
$15,000 and over	2.1	31.0	38.9	28.0
Age of head of household				
Less than 35	2.3	53.7	31.8	12.2
35 to 44	1.8	35.5	36.4	26.3
45 to 54	2.6	39.1	35.3	23.0
55 to 64	3.4	48.8	34.1	13.6
65 and over	9.5	67.8	16.8	5.8
Full-time earners				
0	8.7	65.1	19.5	6.7
1	3.2	50.9	31.7	14.2
2	2.3	30.6	38.3	28.8
All farm-operator households	3.7	47.6	31.7	17.0

Source: Farm Family Living Expenditure Survey, special analysis by CFEI, Agricultural Research Service, U.S. Department of Agriculture, Fall 1976.

The average annual number of miles driven per car in 1973 was 10,304 for the farm households and about 9,990 miles for all U.S. households. The average mileage per car for farm households was directly proportional to the household's income. The average car mileage was 8,110 miles for households with money income after taxes of less than $5,000, compared with 11,846 miles for those with income over $15,000.

Transportation Expenditures

The largest part of the farm household's transportation dollar (table 4) went for the purchase of autos (37 percent), followed by fuel to operate autos and trucks (23 percent), and vehicle insurance (10 percent).

The average household expenditure for vehicles purchased in 1973 by farm-operator households was $956, which is greater than the national figure of $761 per household reported

Table 4. Average expenditures per household for transportation-related items

Item	Dollars	Percent of total
All transportation	1,638.82	100.0
Purchase of autos and other vehicles	755.94	46.1
Autos	600.13	36.6
Trucks	88.35	5.4
Motorcycles and scooters	20.83	1.3
Campers	20.36	1.2
Other	26.27	1.6
Renting and leasing of vehicles	2.69	0.2
Vehicle operating expenses	656.18	40.0
Fuel to operate autos and trucks	378.48	23.1
Lubrications, autos and trucks	33.19	2.0
Fuel and lubrications; other vehicles	7.23	0.4
Tags and fees	39.76	2.4
Vehicle insurance	168.08	10.3
Finance charges	24.41	1.5
Other	5.03	0.3
Vehicle maintenance; repair expenses	193.15	11.8
Tires and tubes	83.15	5.1
Batteries	9.55	0.6
Air conditioning and accessories	4.66	0.3
Service and repair work	77.45	4.7
Other	18.34	1.1
Transportation used on trips	22.83	1.4
Public transportation cost	4.31	0.3
Transportation to and from school for someone attending school away from home	3.72	0.2

Source: Farm-Operator Family Living Expenditures for 1973. USDA, Statistical Reporting Service, September 1975, pp. 34-36.

by the Census Bureau for that year. Since the survey year was not a typical one for farmers because the net farm income was double the amount from the previous year, this may well have affected their spending patterns.

The percentage of cars purchased new in 1973 by farm-operator households was 33 percent, compared with 41 percent for all U.S. households.[2] The average price paid by farm households for a new car in 1973 was $3,590, whereas it was less ($3,490) for the entire United States. For used cars the average prices were $1,418 for the farm households and $1,287 for the general population. All these prices reflect the net cost after an allowance had been made for any trade-in.

[2] Data on all U.S. households are from motor vehicle manufacturers or from U.S. Bureau of the Census.

Purposes of Trips

The biggest difference between the purposes of trips made by farmers and farm managers and those of all U.S. drivers was in the category of earning a living (table 5). Although the percentage of all trips related to earning a living was almost the same for both groups, the breakdown between home-to-work trips and related business trips was very different. The lower percentage of trips farmers made to work and back was balanced by the greater percentage of trips related to their business.

Table 5. Automobile trips by purpose of trip

Purpose of trip	Farmers and farm managers	All U.S. drivers
	Percent	
Earning a living	36.1	36.2
Home-to-work	24.0	31.9
Related business	12.1	4.3
Family business	34.8	31.0
Shopping	13.8	15.2
Medical and dental	3.7	1.8
Other	17.3	14.0
Civic, educational, and religious	7.2	9.3
Social and recreational	20.8	22.4
Visiting friends and relatives	8.0	8.9
Pleasure driving	1.3	1.4
Vacations	([1])	0.1
Other	11.5	12.0
Other	1.1	1.1

[1]Data insufficient for analysis.

Source: Purposes of Automobile Trips and Travel. U.S. Department of Transportation, Federal Highway Administration. *Nationwide Personal Transportation Study*, Report No. 10, p. 69, May 1974.

The lower percentages of trips made by farmers and farm managers for shopping; civic, educational, and religious activities; and visiting friends and relatives, may be due to the fact that these trips require more miles of travel for farmers and farm operators than they do for other drivers (tables 5 and 6). Farmers and farm managers have to travel twice the distance of all drivers to conduct such family business as shopping and visiting the doctor. Trips that involve earning a living are approximately 3 miles less for farmers. Overall, farmers and farm managers average 2 miles more per trip than do all drivers.

Since trips made by farmers are generally longer in mileage and since farm households travel about the same number of miles per year as all households, then it follows that farm households are likely to make fewer trips than are common for all households.

Table 6. Average length of trip by major purpose of trip

Purpose of trip	Farmers and farm managers	All U.S. drivers
	Miles	
Earning a living	7.3	10.2
Family business	11.2	5.6
Civic, educational, and religious	5.7	4.7
Social and recreational	17.0	13.1
Total	10.9	8.9

Source: Purposes of Automobile Trips and Travel. U.S. Department of Transportation, Federal Highway Administration. *Nationwide Personal Transportation Study*, Report No. 10, p. 71, May 1974.

References

Motor Vehicle Manufacturers Association. *1975 Automobile Facts and Figures.* Michigan. 1975.

U.S. Department of Agriculture, Economic Research Service. *State Farm Income Statistics*, Supplement to SB-557. Washington, D.C. 1976.

——— Statistical Reporting Service. *Farm-Operator Family Living Expenditures for 1973.* SpSy6(9-75) Washington, D.C. 1975.

——— *Agricultural Statistics*, 1957 to 1975. Prices paid by farmers. Washington, D.C. 1957 to 1975.

U.S. Department of Commerce, Bureau of the Census. *Consumer Buying Indicators.* Special report on household ownership of cars, homes, and selected household durables: 1970, 1969, and 1960. 5 pp. Washington, D.C. 1970.

——— Unpublished data from the 1973 Survey of Purchases and Ownership. Washington, D.C. 1976.

U.S. Department of Transportation, Federal Highway Administration. *Nationwide Personal Transportation Study.* Purposes of automobile trips and travel. Rpt. No. 10, pp. 69, 71. Washington, D.C. 1974.

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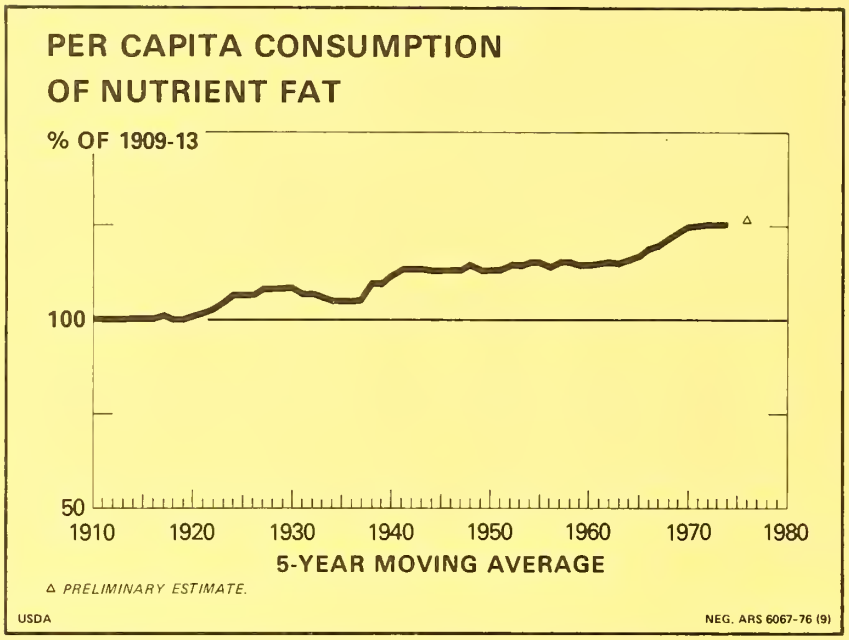
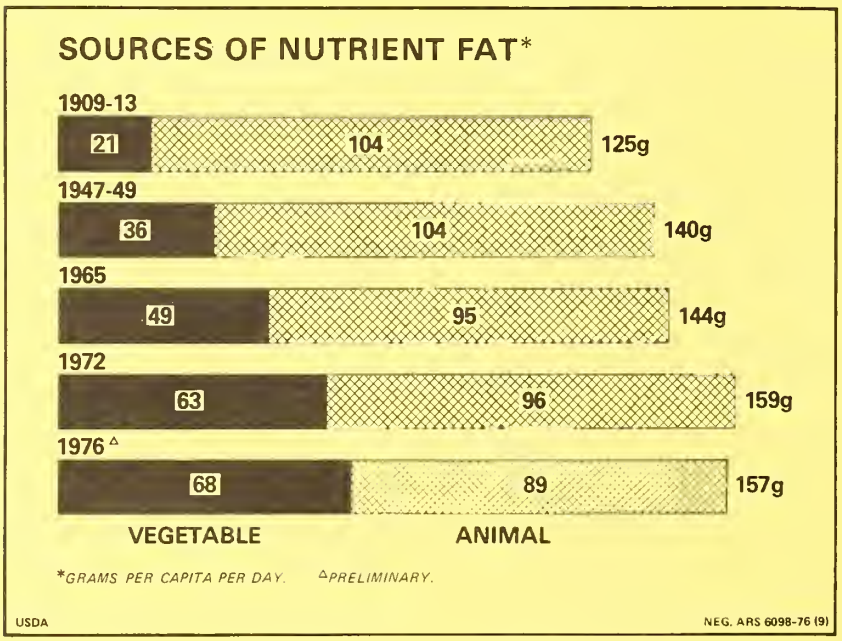
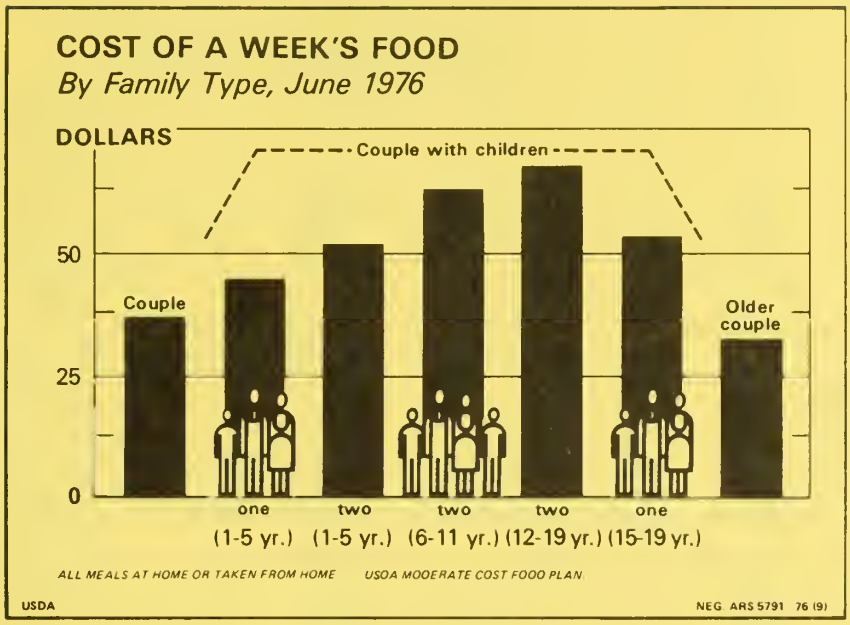
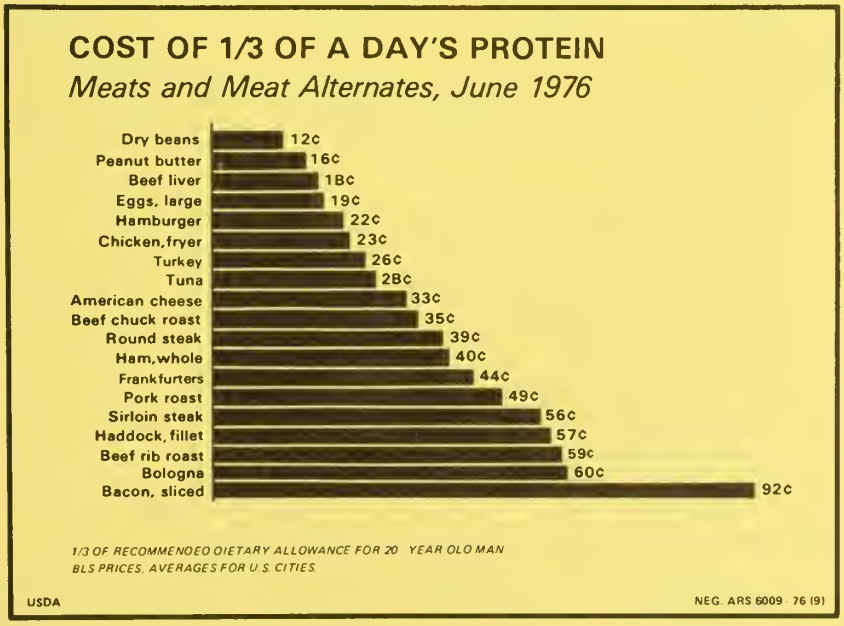




[1] Black and white photographic prints or colored slides of charts may be ordered from Photography Division, Office of Communication, U.S. Department of Agriculture, Washington, D.C. 20250. Slides are 30 cents each and prints are $2.70 (8" X 10" or less). When ordering, please give negative number, title of chart, and, if a print, the size desired.


COST OF A WEEK'S FOOD
By Family Type, June 1976
DOLLARS
Couple with children
50
25
0
Couple
Older couple
one
two
two
two
one
(1-5 yr.)
(1-5 yr.)
(6-11 yr.)
(12-19 yr.)
(15-19 yr.)
ALL MEALS AT HOME OR TAKEN FROM HOME
USDA MODERATE COST FOOD PLAN
USDA
NEG. ARS 5791 76 (9)


COST OF 1/3 OF A DAY'S PROTEIN
Meats and Meat Alternates, June 1976
Dry beans 12c
Peanut butter 16c
Beef liver 18c
Eggs, large 19c
Hamburger 22c
Chicken, fryer 23c
Turkey 26c
Tuna 28c
American cheese 33c
Beef chuck roast 35c
Round steak 39c
Ham, whole 40c
Frankfurters 44c
Pork roast 49c
Sirloin steak 56c
Haddock, fillet 57c
Beef rib roast 59c
Bologna 60c
Bacon, sliced 92c
1/3 OF RECOMMENDED DIETARY ALLOWANCE FOR 20 YEAR OLD MAN
BLS PRICES, AVERAGES FOR U.S. CITIES.
USDA
NEG. ARS 6009 76 (9)

Cost of food at home estimated for food plans at four cost levels, December 1976, U.S. average[1]

Sex-age groups	Cost for 1 week				Cost for 1 month			
	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan[2]	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars				*Dollars*			
FAMILIES								
Family of 2:[3]								
20-54 years	22.20	29.10	36.60	44.00	96.50	126.40	158.70	190.70
55 years and over	20.00	26.00	32.10	38.50	86.60	112.50	139.50	167.00
Family of 4:								
Couple, 20-54 years and children--								
1-2 and 3-5 years	31.60	41.00	51.30	61.50	136.90	177.70	221.90	266.50
6-8 and 9-11 years	38.00	49.40	62.10	74.60	164.80	214.30	269.30	323.50
INDIVIDUALS[4]								
Child:								
7 months to 1 year	4.60	5.70	6.90	8.20	19.80	24.50	30.00	35.50
1-2 years	5.20	6.60	8.20	9.70	22.30	28.70	35.30	42.10
3-5 years	6.20	7.90	9.80	11.80	26.90	34.10	42.30	51.00
6-8 years	7.90	10.20	12.80	15.40	34.20	44.20	55.50	66.70
9-11 years	9.90	12.70	16.00	19.20	42.90	55.20	69.50	83.40
Male:								
12-14 years	10.60	13.60	17.00	20.40	45.90	58.80	73.70	88.50
15-19 years	11.60	15.00	18.80	22.60	50.30	64.80	81.30	98.00
20-54 years	11.10	14.60	18.50	22.30	48.20	63.30	80.00	96.60
55 years and over	9.90	12.90	16.00	19.30	42.80	55.80	69.40	83.60
Female:								
12-19 years	9.50	12.20	15.10	18.00	41.00	52.70	65.30	78.10
20-54 years	9.10	11.90	14.80	17.70	39.50	51.60	64.30	76.80
55 years and over	8.30	10.70	13.20	15.70	35.90	46.50	57.40	68.20
Pregnant	11.50	14.80	18.20	21.70	49.70	63.90	78.80	93.80
Nursing	12.20	15.60	19.50	23.20	52.70	67.70	84.30	100.50

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for each plan were computed from quantities of foods published in the Winter 1976 (thrifty plan) and Winter 1975 (low-cost, moderate-cost, and liberal plans) issues of *Family Economics Review*. The costs of the food plans were first estimated using prices paid in 1965-66 by households from USDA's Household Food Consumption Survey with food costs at 4 selected levels. These prices are updated by use of "Estimated Retail Food Prices by Cities" released monthly by the Bureau of Labor Statistics.

[2]Coupon allotment in the Food Stamp Program based on this food plan.

[3]10 percent added for family size adjustment. See footnote 4.

[4]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5-or-6-person--substract 5 percent; 7-or-more-person--subtract 10 percent.

CONSUMER PRICES

Consumer price index for urban wage earners and clerical workers

(1967 = 100)

Group	Dec. 1976	Nov. 1976	Oct. 1976	Dec. 1975
All items	174.3	173.8	173.3	166.3
Food	181.7	181.1	181.6	180.7
Food at home	179.3	178.9	179.6	180.9
Food away from home	190.9	190.0	189.3	180.0
Housing	181.6	180.7	180.1	172.2
Shelter	182.4	182.1	182.0	175.0
Rent	148.3	147.5	146.9	140.6
Homeownership	195.0	194.8	194.8	187.8
Fuel and utilities	192.0	188.2	186.5	176.1
Fuel oil and coal	264.5	258.0	253.1	248.7
Gas and electricity	200.9	195.5	193.9	179.0
Household furnishings and operation	172.3	171.7	170.9	162.0
Apparel and upkeep	151.8	151.9	150.9	145.2
Men's and boys'	150.7	150.8	150.1	144.2
Women's and girls'	146.9	147.3	146.1	142.1
Footwear	153.4	153.7	152.8	145.7
Transportation	171.4	171.4	170.9	157.6
Private	170.7	170.6	170.2	156.2
Public	178.0	177.6	177.4	170.1
Health and recreation	168.0	167.3	166.1	157.5
Medical care	192.3	191.3	188.9	174.7
Personal care	165.2	164.8	163.9	154.6
Reading and recreation	154.4	154.1	153.5	147.5
Other goods and services	155.9	155.3	154.4	149.8

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Index of prices paid by farmers for family living items

(1967 = 100)

Item	Dec. 1976	Nov. 1976	Oct. 1976	Dec. 1975	Nov. 1975	Oct. 1975
All items	181	180	179	171	171	170
Food	183	---	---	184	---	---
Clothing	---	197	---	---	180	---
Housing	183	182	182	170	170	171
Medical and health	191	189	188	173	174	172
Education, recreation, and other	156	155	155	149	148	148

Source: U.S. Department of Agriculture, Statistical Reporting Service.

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